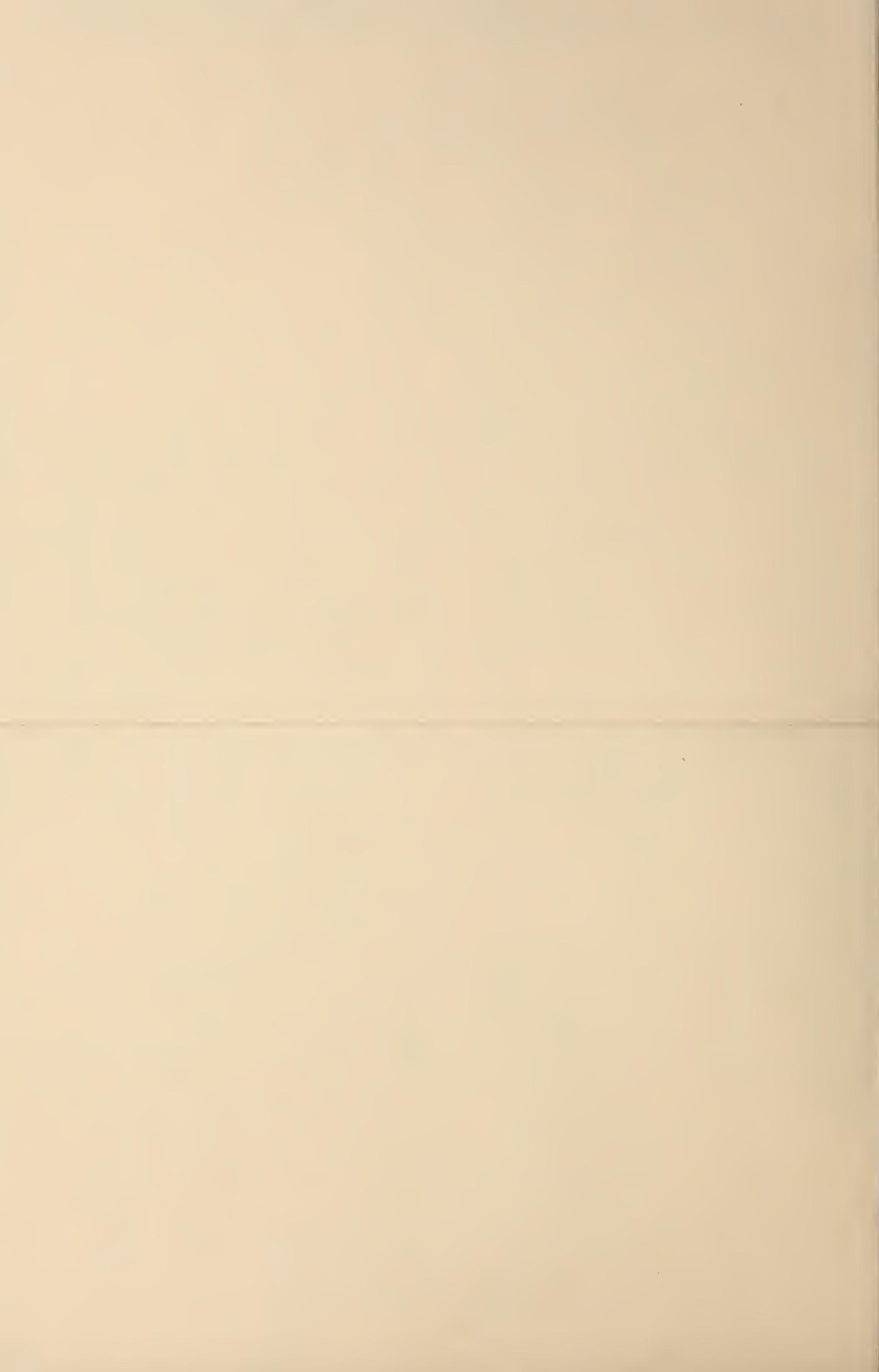


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# FARM & FIRESIDE

EASTERN EDITION.

Vol. V. NO. 19.

PHILADELPHIA, PA., and SPRINGFIELD, OHIO, JULY 1, 1890.

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this issue is

5,500 COPIES.

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725 COPIES EACH ISSUE.

Immediate advertisers, two editions  
printed. The Eastern edition being  
1,200 copies, the Western edition  
being 5,300 copies this issue.

Farm and Fireside has the Largest Circulation  
of any Agricultural Journal in the World.

## Current Comment.

IMMENSE false statements have been going the rounds of the press about the prices of American farm implements in foreign countries. It has been asserted, time and again, that our manufacturers sell their implements cheaper abroad than they do at home. This was the work of political demagogues, who hoped thereby to array the farmers against the manufacturers. As long as the statements were made in a general way, they were met with only a general denial. Emboldened by this, these falsifiers tried to make their statements more plausible by naming the manufacturers and giving comparative lists of prices of farm implements, showing that they were lower abroad than at home. The manufacturers named have promptly shown that these statements were false. One method of making out these misleading lists was to compare the domestic retail price with the foreign wholesale price. To one unacquainted with the deception used, a strong case was made out against the manufacturers.

The fact is, American farm implements are the best made in the world, and they are sold much cheaper at home than abroad. Agriculture and manufacturing should go peacefully hand in hand to secure the highest development of a country, and the efforts of political demagogues to array one against the other should be promptly defeated.

A FRIEND kindly handed us the following concise and pointed article on some of the popular errors of the day: "A recent writer in an agricultural journal, in accounting for the depression in farming interests, made the statement that the currency had been contracted from \$56 per capita in 1866, to \$6 in 1889. Instead of contraction, the currency has been increased during the past twelve years some two hundred and seventy million dollars, and the per capita of circulation is over \$20 instead of \$6. I quote from the treasury report of December 31, 1889:

"In 1878 the net amount of money in circulation was \$668,334,000, in 1889 it was \$988,503,000, an increase of \$270,169,000. To this nine hundred and thirty-eight millions of currency in circulation must be added the vast amount of gold and silver in every day use, making a total,

as estimated by Secretary Windom, of \$22.36 per capita, a sum larger than in any leading country in Europe except France.

"Another statement frequently made to farmers is that national banks are not taxed. Let the farmer get a thousand dollars in national bank stock, and instead of being assessed at about one half its value, as is his farm property, he would pay taxes on its full face value. A farmer recently said, 'The — national bank makes 8 per cent semi-annual dividends, free of taxes.' The said bank makes an 8 per cent annual dividend, and the stockholder receiving it pays 2 per cent taxes, leaving him but 6 per cent, and from 1870 to 1886 the profits on the capital invested in national bank stock has returned a profit of but little over 8 per cent. I have no bank stock, and am not writing in the interest of bankers, but belong to the great army of soil tillers, and fully sympathize with them in their hardships, but a misstatement of facts to antagonize the farming class against the government, or against the national banks, will not help our cause nor lift the farm mortgage. We are getting back in the direction of ante-war prices—have not near reached them yet in agricultural products, as our ante-war farmers well know—but rather than adopt the ante-war style of living for ourselves and families, the farm mortgage may grow until it takes the farm.

"There are many doctors in political economy with a panacea for all the ills that the farmer and laborer is heir to, but the old law of supply and demand, the success of those who spend less than they earn, and who are industrious and provident, and the failure of the improvident and intemperate, is, after all, the universal law—the law that makes the poor and the rich; that lifts or forecloses the farm mortgage."

UNDER the name of the American Book Company, school-book publishers have formed a trust that will control nine tenths of the text-books sold and used in this country. This means that the people shall not have cheap school-books. It may mean something else of importance. The trust, by monopolizing the publication and the sale of books used in every school in the land, will have the power of improperly influencing the education of children by the matter it puts in or omits from text-books, the distortion of history, etc. This power may never be used, but it is a dangerous one to leave in the hands of an unscrupulous trust. The war against the trust should be carried on vigorously.

IT is evident from the opinions expressed in the discussion now going on about the silver question, that the great majority of the people want silver money. They may not want to use the coin itself—indeed, they prefer the certificates for actual use—but they do want both gold and silver as the basis of our currency. But there is a great difference of opinion among them as to the coinage of silver. Some favor the issue of all the silver certificates the country can use, based on the bullion value of silver.

Others will not be satisfied with anything less than the free, unlimited coinage of silver of such weight and fineness that the bullion value of a silver dollar will be less than its face value. They claim that this would be a great boon to the debtor class.

In speaking on a silver bill now before congress, a senator who stands without a peer on questions of finance, says:

If we can agree upon some measure that will furnish the people of the United States more money (for I think we want it), and will also tend to advance silver bullion nearer and nearer and up to the standard of gold, I am willing to vote for such a measure; but I do not want to embark upon the wide sea of free coinage of silver, and I do not want congress to pledge itself to buy all of the silver which may be offered—silver melted from the pits of India, China and all the world. I do not want to vote for any such bill. Let those who would take the risk of such a speculation take it, not I; but anything whatever that can be done by this bill, or any other bill, to give us more good paper money, based on actual deposits of gold and silver, or that will raise the value of silver, I will favor. I would buy every ounce of silver produced in this country, keep it in the treasury vaults, and issue certificates upon it, based on its market value, to any extent that may be desired, and I would make them legal tender, so that they would travel all over the world, be as good as gold and be on a parity with gold.

It seems to us that legislation now based on this proposition would advance the price of silver and ultimately result in the free, unlimited coinage of silver on equal terms with gold, and give the people what they want without injury to any.

THE following is the text of the silver bill passed by the Senate:

SECTION 1. That from and after the date of the passage of this act the unit of value in the United States shall be the dollar, and the same may be coined of four hundred and twelve and one half grains of standard silver, or of twenty-five and eight tenths grains of standard gold; and the said coins shall be equally legal tender for all debts, public or private; that thereafter any owner of silver or gold bullion may deposit the same at any mint of the United States to be formed into standard dollars or bars for his benefit and without charge; but it shall be lawful to refuse any deposit of less value than one hundred dollars, or any bullion so base as to be unsuitable for the operations of the mint.

SECTION 2. That the provisions of Section 3 of an act to authorize the coinage of the standard silver dollar and to restore its legal tender character, which became a law February 28, 1878, is hereby made applicable to the coinage in this act provided for.

SECTION 3. That the certificates provided for in the second section of this act and all silver and gold certificates already issued, shall be of denominations of not less than one or more than one hundred dollars; and such certificates shall be redeemable in coin of standard value. A sufficient sum to carry out the provisions of this act is hereby appropriated out of any money in the treasury not otherwise appropriated. The provision in Section 1 of the act of February 28, 1878, entitled, "An act to authorize the coinage of the standard silver dollar and to restore its legal tender character," which requires the Secretary of the Treasury to purchase at the market price thereof not less than two million dollars of silver bullion per month, nor more than four million dollars, worth per month of such bullion, is hereby repealed.

SECTION 4. That the certificates provided for in

this act, and all silver and gold certificates already issued, shall be receivable for all taxes and dues to the United States of every description, and shall be a legal tender for the payment of all debts, public and private.

SECTION 5. The owners of bullion deposited for coinage shall have the opportunity to receive coin or its equivalent in the certificates provided for in this act, and such bullion shall be subsequently coined.

SECTION 6 provides for covering into the treasury the fund held for the redemption of national bank circulation.

The title of the bill was amended so as to read, "An act to provide for the free coinage of gold and silver bullion, and for other purposes."

FARM AND FIRESIDE is opposed to the two bills now before congress, the object of which is to exclude from the mails as second-class matter all the popular publications known as "libraries." These bills are not in the interest of the people who read good books published in a cheap form. If passed, the postage on this class of publications will be increased from one to eight cents per pound. Only certain publishers of high-priced cloth books, and the express companies, will be benefited. The people want lower postage, not higher.

Upon this subject ex-Postmaster-General James says:

The constant tendency of our postal system has been toward the extension of the privileges of the mails in every branch of correspondence and every form of literary production. Its facilities first made possible the cheap publication of newspapers, and later on, standard works of literature, by placing upon all periodical popular reading matter the lowest rate of postage ever known in a civilized land; namely, one cent per pound throughout the United States. This low rate has developed the popular library periodicals like the "Franklin Square," the "Seaside" and others, by which the best standard works of English literature, like "Green's History of the English People," "Macaulay's History," the works of Dickens, Scott, Cooper, George Eliot and Shakespeare, have been published in ten-cent volumes, and made accessible to the people of the most distant states and territories, and enabled the present generation to possess every important new publication in science as well as fiction. In no other country have the masses ever before enjoyed such an estimable intellectual privilege, and no money ever expended by the government in any of its multiform agencies has ever conferred such enormous advantages. This extension of reading good books by the masses is in itself one of the marks of progress of civilization, and of the widening benefits of a government of the people and for the people. This impulse and direction, of course, must not be changed. There must be no steps backward.

A RECENT bulletin of the Ohio Agricultural Experiment Station contains an instructive article on actinomycosis, "lump-jaw," or "big-head," an infectious disease of horses and cattle, caused by a parasitic fungus. While it is not usually advisable for the stock grower to attempt to do the work of a veterinary surgeon, the description given in this article of the mode of treatment for the removal of simple tumors by caustics is so clear and plain that a stock grower of fair skill and intelligence need not, in the absence of a veterinarian, hesitate to follow it.

## FARM AND FIRESIDE.

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## Our Farm.

## DOINGS OF THE DEPARTMENT AND THE STATIONS.

BY JOSEPH (TUSCO) GREINER.

**T**HE PLANT DISEASES.—It is sometimes recommended to soak seed, grain, potatoes or other seeds in weak solutions of various chemicals, for the purpose of guarding against the attacks of fungous diseases, especially smuts, scab, etc.

Prof. A. A. Crozier speaks in the *Journal of Mycology* (Vol. 6, No. 1), issued by the Department of Agriculture, Section of Vegetable Pathology, about experiments made with blue vitriol (five pounds to ten gallons of water) and green vitriol or copperas (one pound for a bushel of seed with water enough to cover the grain). The conclusions are that blue vitriol has a general retarding effect, even when the application is made for the shortest time. The young plants also appear as if greatly weakened. Sometimes the leaves appear as if scorched, and altogether, the plants are smaller than those from seed soaked in water only. Green vitriol had nearly as injurious an effect upon the seed as blue vitriol, although there was no scorching of the leaves noticeable, even when copperas solution was pretty strong. The moral seems to be that it will be advisable to go a little slow in following this practice of soaking seed in either of these solutions; but, if done, the latter should be very weak.

In the same number of the *Journal* Prof. B. T. Galloway gives a summary of the latest methods of treating grape vines, pear and apple trees for the diseases most apt to attack them. Black rot and brown rot of the grape are fought by collecting and burning all the trimmings after pruning, also all the old berries and leaves and other trash, and by spraying the vines at intervals of ten to fifteen days, making the first application when the leaves begin to unfold, with the often mentioned Bordeaux mixture. After the third application the simpler and cheaper ammoniacal solution of copper carbonate may be substituted for the Bordeaux mixture. A line of treatment, such as the foregoing, will necessitate six or seven sprayings, and the total cost of the same will practically be about one cent per vine.

The powdery mildew, which is doing harm only in certain parts of the South and along the Pacific coast, succumbs readily to sulphur, either in the form of flowers

or sulphur or solutions of the sulphide. In applying the sulphur, bellows should be used, and the first application be made ten or twelve days before the flowers open; the second when in full bloom, and a third three weeks or a month later, if the disease seems to be on the increase. The best results are obtained when the applications are made with the thermometer ranging from 80° to 100°. Excellent results have also been obtained by spraying the vines with a solution of half an ounce of potassium sulphide to the gallon of water. Anthracnose of the grape may be treated, experimentally, by the removal of all the wood showing the scars made by the fungus and washing or spraying the vines, before the buds swell, with a saturated solution of iron sulphate (copperas). As soon as vegetation starts, watch the vines carefully, and at the first appearance of the disease apply with a sulphuring bellows a powder made of equal parts of flowers of sulphur and slaked lime. If this does not check the malady, try the sulphur alone.

Pear scab and pear leaf blight may be successfully treated by spraying with the Bordeaux mixture. For seedlings, make five applications, the first when the leaves are one quarter grown, others at intervals of ten days until the trees are budded. For large trees, spray five times; first when the fruit is the size of peas, and thereafter at intervals of twelve or fifteen days. For applying the mixture to trees less than twelve feet high, and especially to seedlings in the nursery, the knapsack pumps provided with the improved Vermorel lance and nozzle will answer. Where the trees are large and in considerable numbers, it will pay to get a strong force pump, mount it on a barrel, and place the whole in a wagon or cart to be moved about at pleasure. In all cases, however, it will be necessary to use the Vermorel nozzle, as it is the only one that will not clog.

The subject of peach yellows is treated by Prof. Erwin F. Smith. No new information seems to have been developed, and the true cause of the disease is not yet known. The "rooting out" process has proved entirely successful in Michigan and elsewhere, where tried with the necessary persistence, and so Prof. Smith advises to "dig out, and burn, and do it promptly."

Prof. E. S. Goff has given especial attention to the apple scab, and recommends treatment with copper carbonate in ammonia largely diluted with water. The formula is as follows: One ounce of copper carbonate; dissolve in one quart of ammonia, and dilute, when ready to make the application, with twenty-five gallons of water. For applying the liquid to the trees, a force pump to which is attached a few feet of hose, fitted at the end with a spraying nozzle, will be needed. Excellent pumps are now made by the larger manufacturers expressly for spraying purposes, fitted with all necessary attachments, and costing \$10 and upwards. Smaller pumps, which would answer fairly well for a few trees, may be had at from \$2 to \$10 each. Much concerning the time of first and subsequent applications remains yet to be settled by experiment; but Prof. Goff recommends that those who spray their apple trees for the prevention of injury from the codling moth, make the experiment, in a portion of the orchard, of adding the precipitated copper carbonate to the water, at the rate of an ounce to twenty-five gallons. No harm to the foliage can result from this measure, while we have every reason to expect that much benefit will accrue in the prevention of the apple scab.

A cheap, portable spraying pump has long been needed, not only for spraying grape vines, etc., with fungicides, but also to spray potato vines, etc., with poisonous liquids for potato-bugs. I have often called attention to this want, in the hope that manufacturers would try to supply it. Prof. Galloway now gives the following cheering information:

"Ever since the work of the section was inaugurated there has been felt the need of a cheap, serviceable and effective apparatus for spraying grapes and all the low-growing crops. Heretofore, we have had to rely mainly upon machines imported

from France; in fact, with but one exception, the only pumps that have given satisfaction in our vineyard work have been purchased abroad. The average fruit grower cannot afford to send to France for a machine that will cost him, laid down in this country, all the way from \$18 to \$25, nor can he pay \$21 for a pump made here, notwithstanding the fact that it is a most excellent machine and costs almost the selling price to manufacture it. In short, a knapsack pump, be it ever so serviceable, at \$21 or even \$18, is entirely beyond the reach of the average farmer, gardener and fruit grower. Consequently, he has to rely upon inferior machines, and, as a result, his treatments are frequently unsuccessful for the simple reason that the remedies are not properly applied.

"We have had the matter of providing a cheap and serviceable knapsack pump under consideration for some time, and can now positively announce that the machine will be on the market in a few weeks. The pumps will be made in two or three styles, and as there will be no patent on them we hope manufacturers throughout the country will be able to offer them at about \$12, thus placing them within the reach of all."

The hot water method is recommended by W. A. Kellerman and W. T. Swingle for preventing smut in oats and other cereals. The treatment consists simply in immersing the infected seed in scalding water (132° Fahr.) for not less than five nor more than fifteen minutes, and immediately thereafter cooling it quickly by immersing in cold water. The authors say:

"In order to carry out this process satisfactorily when a large amount of seed is to be treated, two large vessels must be provided. These can be large kettles hung over a fire, or large boilers on a cook-stove. One vessel is to contain heated water (about 110° to 120° Fahr.) for the purpose of warming the seed preparatory to dipping into the second vessel. This second vessel is to contain water at a temperature of 132° to 135°. Were not the seed warmed before dipping into the vessel of scalding water the temperature of the latter would be very much reduced, perhaps below 130°, and then the treatment would not be effectual. The seed, half a bushel or more at a time, is to be placed in a coarsely-woven basket having a lining of wire netting with meshes fine enough to prevent the egress of the grains, say, twelve to the inch. A heavy wire bushel-basket may be used, or a light iron frame made, over which the wire netting may be stretched. A lid or cover must be provided for, otherwise a portion of the seed will escape upon immersion. A sack made of coarsely-woven cloth might be used instead of the basket, but it is much less convenient. It is necessary that the basket admit the water freely and immediately upon its immersion; otherwise, the treatment cannot be expected to be effectual. An immersion of a few moments (less than a minute) will sufficiently warm the basket of seed, provided that it be lifted out, then plunged in a time or two and shaken or revolved so that the water may come in contact with the grains. Then plunge it immediately into the second vessel, and with similar motion bring every grain into immediate contact with the scalding water. The lifting and plunging should be continued at short intervals until the seed is removed. In this way every portion of the seed will be subjected to the action of the scalding water. Immediately after its removal, dash cold water over it or plunge it into a vessel of cold water and then spread out to dry. Another portion can be treated similarly, and so on till all of the seed has been disinfected."

This outline of treatment is for oats, wheat and rye. Barley must be previously soaked in cold water eight hours; otherwise, the treatment will not prevent smut.

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## RAISIN CULTURE IN CALIFORNIA.

## SECOND PAPER.

As before stated, raisins, as a rule, are grown on lands requiring irrigation. Such are the best in every way for the purpose. Crops are grown on irrigated lands in two quite different ways: First, by bringing the land to a dead level, in large or small tracts, surrounding it with a low dike or dam, and then letting the water in, covering the whole surface with such an amount that it will absorb a sufficient quantity. This is the safest plan for raisins, for in this way the phylloxera, a grape-root louse most destructive to the vine, is easily drowned out. Second, by running the irrigating water in furrows, in the line of drainage, or slope between the rows of vines, trees or plants. This is the best and least laborious plan for everything except small tracts, alfalfa and raisin vineyards, and much the best for the raisin vines where there is no phylloxera, and, as it has not been introduced into the San Joaquin valley, many vineyards are so irrigated.

After the land is properly leveled, it is ready for planting. It is also done in two ways—cuttings or rooted vines. Cuttings are the cheapest, but rooted vines are also and I should prefer the roots. Planting of either is as simple as planting a tree or plant, and is speedily done. The vines have usually been planted in rows eight feet apart each way. This is a very bad mistake. They should be planted five feet apart in the rows east and west, with those running north and south fourteen feet apart, thus giving room to cure the raisins in the ground between the rows and to dry the fruit out.

The culture the first season is simple, like that of corn or potatoes and the vines will give a few fine clusters of fruit the first autumn. The vines are also allowed to grow as they please; when the cluster has fallen (for there is hardly any means of knowing that it is winter time, except it be that the days are short), the vines are pruned. This is also very simple, and best learned in a few moments from our nearest neighbor. Suffice to say here, that the vines are cut back to two or four of the highest buds, the aim being to form the "head" of the vine sixteen to twenty inches from the ground, for no stakes for tying up are used. Of course, the young vines must be irrigated as needed, and this kept up each year.

The second season the culture is the same. The busy time for culture to keep the weeds in subjection is in March, April and May, but, even then, it requires no great effort, not more than the right stirring of the soil for the good of the plants. This second summer a little more labor is required, for only the two to four uppermost buds that start are allowed to make shoots; the others must be rubbed off, and any suckers starting after served the same way.

This second season, if all has done well, we will get quite a little bunch of grapes from our vines that can be cured into splendid raisins. The next winter the pruning is about the same; also, the after culture.

Before midsummer of the third year, if we are workers, and wish to get the full money product from our vines, we must prepare ourselves with trays enough to cure our raisins on. These are made of thin, wooden strips, all of a size, about three by four feet, and we must have enough to carry the whole of the first crop at one time, and one more. We may expect—no, there is no expect about it—we always get, this third summer, a nice little crop of grapes, and then when the great, green clusters have become a pale straw color, translucent, as sweet as honey, we clip them carefully from the vine, lay them carefully on the trays, so as not to bruise them or rub off their delicate bloom, and then lay the loaded trays on the warm, dry ground, in the face of the bright, hot sun, to cure. In a few days, the upper surface of the grapes has been kissed by the sun so fiercely that they have blushed to a fine amber brown. We then lay our one empty tray, reserved

EXTRACTS  
FROM CORRESPONDENCE.

FROM TENNESSEE.—Owing to continued booms in our section, prices range high. Outside capital is coming in by the millions. In the course of about ten years there will be a row of furnaces, coke ovens, factories, etc., from Dayton to Harriman, fifty miles. Let them come. One and all immigrants are welcome, and so are their dollars. G. C.

Lorraine, Tenn.

FROM KANSAS.—I have been in Kansas since 1865, and have traveled over the state a great deal. I think if a man sees the fine orchards, and fine fruit, stacks of grain and hay, cribs of corn, fine horses, cattle, hogs and sheep, and the fine farms, it ought to knock the old fogey out of him. If a man goes to the Kansas City stock-yards and sees the stock coming in on the different roads, it will soon convince him that Kansas is not a failure. A. F. B.

Finney, Kan.

FROM WASHINGTON.—Everybody in the Walla Walla valley is jubilant at the fine prospects before them. Last year's wheat crop was not a success on account of a hot wind that came just as the grain was in the milk. Many of the farmers barely made their seed. The past winter was a severe one; a great deal of stock perished for the want of shelter and food. Even those who had plenty of feed lost great numbers. Farm hands generally get \$1 per day. Wheat is worth about 65 cents a bushel; butter, 35 cents per pound; eggs, 20 cents per dozen, and other things accordingly. Wallula, Wash.

C. W. G.

FROM PENNSYLVANIA.—Tioga county produces a large amount of soft coal, there being four large coal mines in operation. This county is mountainous and rugged. The hillsides abound in sandstone, some of which is used in making glass. Lumbering is carried on quite extensively with hemlock timber; the bark is used in tanning sole leather. Some of the largest tanneries in the world are situated in this county. Some farming is carried on in the valleys, the soil being sand and loam, and yielding heavy crops. Oats, potatoes, corn and buckwheat are the chief crops grown. J. C. V.

Blossburg, Pa.

FROM WEST VIRGINIA.—Calhoun county is west of the Alleghany mountains, and is in the western part of the state. It contains 260 square miles, and has a population of 9,787. The land is rough, but productive. The main crops are corn, wheat, oats and potatoes. Apples, peaches, plums and grapes do well here. Grasses also do well. Corn is \$1 per bushel; wheat, \$1.10; oats, 50 cents; and potatoes, 50 cents. We have good schools, good water and a good climate. We have no railroads in the county. Woodlands range from \$4 to \$10 per acre; improved land, \$8 to \$20 per acre. The land is well timbered with poplar, white oak and walnut. Farm hands are paid \$6 to \$12 per month. I. S. F.

Big Springs, W. Va.

FROM VIRGINIA.—Purcellville, our nearest railroad station, is having a boom in a small way. A large roller mill is going up, also a hardware store and post-office. There are large carriage-shops that are getting more work than they can do. This is a fine farming and grazing valley. Land is cheap, and I advise those intending to purchase to do so, as land will be sure to increase in value soon. Quite a number of persons are quitting the creamery business and going into grazing, as the price of cream did not justify them continuing in it. If the farmers in this and other states would sow more in grass, farm their land better and manure more, there would be less of them quitting and more of them doing better. Less farming, better done, would soon make a change in things. S. M. J. H.

Hillsboro, Va.

FROM TEXAS.—Santa Anna is a small town, situated at the foot of two small mountains called the Twin mountains. The climate is delightful, and this is a great health resort. Farming land is cheap and very good. The people are the kindest, cleverest and most obliging I ever lived among. There are two large hotels here constantly crowded. Very many persons come hundreds of miles to spend the summer here, as this is considered the healthiest place in the state. The middle of the day is quite warm, the thermometer sometimes going as high as 90° in the shade; but there is always a good, cool breeze blowing, and the nights are cool enough for blankets and most delightful for sleeping. I have not enjoyed as good health for years as since I came here. I had been in very poor health for many years before. E. H. B.

Santa Anna, Tex.

FROM MICHIGAN.—In the lower peninsula of Michigan land varies in quality from heavy clay and rich loam to sand of light quality. Of the latter there is but little, while the larger share is heavy loam, which sells for \$4 to \$12 per acre, according to location; unimproved lands relatively lower. The whole country is (or was) heavily timbered, mostly beech and

maple, but there are considerable quantities of pine along the larger streams. There are many beautiful little lakes and trout brooks which water the country well, but no stagnant waters or waste swamp lands. It is very healthful. Wheat, corn, oats, rye, barley, potatoes, rutabagas, etc., do well. Potatoes, especially, yield very large crops of the most excellent quality. H. C. P.

Big Rapids, Mich.

FROM KANSAS.—J. R. F. takes exception to my statement made some time ago, and concludes by saying, "Let us represent her as she is." Now, that is just exactly what I did, speaking only of this part of the state, and not of his. Stafford county is as good as any west of the 97th meridian, and I reaffirm my former statement, which can be easily substantiated, that timothy and clover cannot be grown here; after oft-repeated trials, the entire absence of both stands as proof. If J. R. F. will visit this locality and show us any fruit to speak of, he will first have to admit that it grew somewhere else, perhaps in his part of the state, where, I admitted in my former statement, it is grown with some degree of success. I will say, further, that J. R. F. can get money at 2 to 3 per cent a month on chattels, and at 8 to 10 per cent on realty, if he can show up sufficient security. Our taxes are not much under 5 per cent on an average. Point View, Kans.

L. W.

FROM IDAHO.—Weippe lies between the north and south forks of the Clear Water river, in the great Clear Water country. As a farming, grazing, timber and mineral country this stands second to no other county or state in the north-west. A visit to the luxuriant and hospitable homes of some of our settlers will show what can be accomplished in this country. What was a few years ago the home of the deer, bear, elk, cougar, coyote, and the sporting grounds of the red man, is to-day the homes of happy families. The home-seeker, farmer, business man or capitalist can find a field for his fame right here. The climate is mild and equable. The average temperature in winter is 30° above zero, and in summer it never goes above 90°. I have lived in Europe, New England, and in the no-winter state (California), and am now enjoying the healthiest and most invigorating air I ever inhaled. The greatest drawback to this country is that we have, as yet, no railroads. C. J. M.

Weippe, Idaho.

FROM CALIFORNIA.—Stanislaus county is situated in the central part of the state, in the San Joaquin valley. It has a population of 12,000 inhabitants. The county contains 500,000 acres of arable land, there being a great diversity of soil. The climate is healthy. The average temperature during the winter is 48.3° above zero, and in summer the thermometer runs up to 105°, and sometimes higher. The rainy season begins in November and lasts until May. The principal productions are wheat and barley. Wheat yields from 20 to 35 bushels per acre. There are two irrigation districts formed under a state law; one comprising 176,000 acres, and the other 108,000 acres. An irrigating canal is in course of construction, and after completion our principal productions will be raisins, fruits, vegetables, nuts, alfalfa and grain. Land is worth \$30 and higher, according to location. A small amount of mining is done in the foothills. We have very good educational facilities, and churches are numerous. Two railroads traverse the county, north and south. Modesto, the county-seat, is a thriving town of 3,200 inhabitants, and is 114 miles, by rail, from San Francisco. Modesto, Cal.

J. C. J.

FROM TENNESSEE.—I have lived in Coffee county six years. Tullahoma is a thriving little city with a well-merited reputation as a health resort, summer and winter. Its fine waters of every variety, possessing extraordinary medical virtues, with the pure, mountain air and mild climate, make it one of the most delightful places on the continent. It is surrounded by every variety of hidden wealth, such as coal, iron, marble, granite and the finest quality of laminated slate for roofing purposes; also an immense field of salt, with natural gas in abundance to evaporate the brine, and a large field of manganese, and large tracts of hard wood, all within easy reach of this city. With her railroads completed and her minerals developed, Tullahoma will be able to support a population equal to any inland city on the continent. Lands are cheap; they can be had at prices ranging from \$2.50 to \$5 per acre. Other land sells for more, according to improvements. In no place did I ever see clover grow better. Fruit of every kind does well here. It is a common saying among the intelligent, Ohio settlers that they can make better crops with the same labor and expense here on land that cost \$5 to \$10 per acre, than they could in Ohio on land at \$50 to \$75 per acre. C. C.

Tullahoma, Tenn.

FROM TEXAS.—It is reported in some northern papers that the wheat crop in Texas is a failure this season. This is a mistake in regard to this part of the state. Many think the yield will be as good as last year, which was an average of twenty-five bushels per acre. Corn never looked better, and oats, sorghum,

millet and vegetables are good. Most farmers have planted from twenty to one hundred acres of cotton, which is looking well, and we expect at least half a bale per acre. Wheat is selling at 95 cents; corn and oats, 45 cents per bushel. Everything a farmer has to sell brings fair prices. This region of Texas seems to be on a boom, both country and towns. Why not, considering our lovely climate, bountiful crops, cheap lands, rich and productive soil, and above all, good health? Among the flourishing towns in this part of the state, Wichita Falls, the county-seat of Wichita county, seems to be in the lead. It has two saw-mills, a large flouring mill, two grain elevators building, four brick-yards, four large lumber-yards and many good business blocks, hotels and residences building as fast as material and men can be had to build them. We have two railroads, and expect two more soon. We are to have electric lights, water-works and street-cars as soon as they can be put in. The trade in farm implements kept six firms busy. Those that want to settle in a good farming country should not fail to see this locality. T. R. W.

Wichita Falls, Tex.

FROM INDIAN TERRITORY.—I live in the eastern portion of our nation, in Tahlequah district. We are a nation of farmers, and own our land in common. Each citizen can make a home on the public domain where he chooses, provided he settles beyond one fourth of a mile from any other improvement. We hold our land by patent, in fee simple, and are guaranteed the title by the United States government, as long as "grass grows and water flows." So why is it that the white men are clamoring for our lands? Have we not the same right to hold our unoccupied lands, unmolested, that any man in the states has to hold his land for which he has paid his money and holds deeds of? We Cherokees, as a nation, are not dependent on the U. S. government for support or anything else. We have sufficient money invested in U. S. bonds to run our affairs on the interest alone, never touching the principal. We number some twenty thousand souls. We have a printed code of laws. We support one hundred public or free schools nine months in the year, all of which are taught by native teachers, the majority of the teachers being graduates of our high-schools. We have two high-schools, one called the female seminary, which cost us about \$70,000, and will accommodate one hundred and eighty young ladies. The male seminary is some smaller, and will accommodate one hundred and fifty young men. We have an orphans' home, where we keep two hundred orphan children until they become seventeen or eighteen years old. We have an asylum, where we take care of all our insane, decrepit and blind. Last, but not least, we have a penitentiary, which, I am sorry to say, is kept pretty well supplied with inmates. So you see, "poor Lo," as represented by the Cherokees, is quite able to take care of himself, if the white man will only let him alone. We have a good agricultural country, and raise lots of stock of all kinds. YOUNG BEAR.

Tahlequah, C. N., Ind. Ter.

FROM TEXAS.—An eminent New England physician has noted that San Antonio has the finest pulmonary health climate in the world. I concede that to San Antonio. It is a little further south and may be a little more favorable to people afflicted with throat troubles; but I think the Eastland section healthier than that. I am sure one would never contract a throat disease there. The country is 1,800 feet above sea level. The atmosphere is not attenuated so as to be troublesome, but is rare. The country presents a rugged appearance to one when riding on the T. & P. or H. & T. C. roads, which intersect at Cisco, the county's largest town, on account of the foothills and mountainettes, which serve to break off the infrequent "northerns." When traveling by private conveyance, however, these break the monotony and render the country very picturesque. They also make it cooler in summer and warmer in winter, as above indicated. Two thirds of the county consists of flats, which are partly the remainder of hills. Corn makes 40 bushels; wheat, 20; oats, 90; and cotton, three fourths of a bale per acre. This is the general average, and they are the prevailing crops. Sorghum, grapes, hemp, jute and castor beans do well. Potatoes should be classed with the staple crops, as they produce from 150 to 300 bushels to the acre. Vegetables and fruits grow to perfection. They are void of worms, and absolutely perfect. Watermelons will make a crop sometimes by scattering the seed broadcast, and are delicious. The sweetness of the fruits and vegetables is due to the dryness of the climate. It is a fine stock and poultry country. The people are tolerant and more intelligent than I have found elsewhere in the South. The school facilities are the very best I know. There are no Negroes there. Federal and confederates "reunion" together, and there exists no war nor race prejudice. The people are devoted to the upbuilding of their country, which was roamed but twenty years ago by the Comanches, the buffalo, the jack-rabbit and the prairie dog. Coal is abundant, and can be obtained at a depth of one hundred feet. A shaft is now being sunk. Cistern water is mostly used, and,

on account of the purity of the atmosphere, is caught at any time. There is an artesian well there 1,300 feet deep, and a public well on the creek 600 feet deep which is never-failing. There are some springs in the county. The rainfall is twenty-eight inches. The sun nearly always shines, and clouds never darken. One can work three hundred days in the year with his coat off. I know of no better country for the small capitalist and those seeking nature's best. Lands are worth from \$5 to \$15 per acre; unimproved, \$2 per acre, and are rapidly enhancing. B. I. E.

THE CHEROKEES.—I will give some of the manners, customs and facts not generally known about the Cherokees. They generally dress well—better than the most of the whites. The men take great pride in wearing fine hats, leather bands being worked in very artistic style, with silver and other ornaments, some of them costing ten to twenty dollars each. The girls and women dress equally as well as the better classes in Ohio, and it makes them mad to call them squaws; they call themselves girls or ladies. They have but little courtship before marriage, and after marriage the men notice their wives but little, except to furnish them with everything they need and almost everything they want, and when they want anything they will buy it at any cost. The full-blooded Cherokees generally rent or lease their farms to white men. They furnish teams, tools and seed, with house and garden, for half the crop. Often one Indian owns and rents several fine farms. They ride out and look after their herds of cattle. They are great people to feast and enjoy themselves, and their house-raisings, etc., are always accompanied with a big dinner and supper and a dance at night. They have plenty of schools and churches, and most of them are well educated in English. The schools are free for Cherokee citizens. The Cherokee Nation furnishes all school supplies free to citizens. The Indian language is not taught. Most of the Cherokees belong to church, principally to the Methodist and Baptist. They have only one chief, who is called the principal chief. He is nominated and elected every four years, and lives at Tahlequah, the Cherokee capital. When a man wishes to marry a Cherokee woman he has to get a permit and get not less than ten Cherokees to sign it at a dollar each; otherwise, same as in Ohio. It is better to marry a Cherokee girl than to marry \$10,000, for each Cherokee has thousands of dollars in the national treasury, besides being entitled to a clear section of their pick of choice land, and free range for stock, etc. They take loving care of their dead, and build little, neat houses over the graves. A good doctor is held in high esteem among them. There is not much fruit yet in the Indian Territory, but apples, peaches, pears, etc., do well. Apple and peach trees grow to a large size and live to a great age, and the fruit is equal to any in Ohio. It would be a great place for good fruit agents. Most all kinds of grapes of the wild varieties grow in great profusion. Berries of all kinds do exceedingly well, but are not much cultivated. Garden truck is almost as easily raised as weeds. Sweet potatoes grow very large with but little care, and keep sound in open cellar till April, like Irish potatoes. Melons grow fine flavored and large in great abundance; they generally plant them among their cotton. From Fort Gibson up the Neosho river and the adjoining prairies the main crop is wheat; they drill it in, using no fertilizer, and the average yield per acre is twenty-five to forty bushels. The soil on Neosho river bottoms is black as soot, very deep, and in part waxy. The best wheat land is a dull red on a subsoil of sand and yellow clay. The average yield of flour (roller) from this wheat at South-west City, Missouri, is forty-two to forty-four pounds of extra white. The tenth acre of this fine land is not cultivated, but waves in grass and flowers. This wheat land also averages fifty to eighty bushels of corn per acre. The streams have deep channels, and seldom overflow. There are some of the finest prairies in Cherokee Nation that I ever saw; they are rolling. Some of them have mounds over them in regular rows. These mounds are about the shape of a tortoise shell, forty to one hundred feet long, and high in proportion. They generally raise full crops in the Cherokee Nation, have very mild winters, pleasant summers and but little drought. It will at no distant day be one of the finest agricultural districts in the West. The majority of the Cherokee citizens are in favor of being admitted as a state; the Choctaws, Chickasaws and other tribes are in favor of the same.

Beallsville, Ohio.

L. M. M.

BIG RAPIDS, Mich., June 14, 1890. The Peerless Atlas of the World is worth five dollars to any family, and I would not take five dollars for mine and do without it.

ELIAS DIETDERICH.

BLENDON, S. D., June 9, 1890.

I just received the Peerless Atlas. Am well pleased with it. Have shown it to twenty persons and they call it splendid, and as good as a ten dollar atlas. C. H. GORDMIER.

NEWTON, IND., May 20, 1890.

The Peerless Atlas and picture, "Christ Before Pilate," were duly received. If you had sent me a twenty-dollar bill, I could not have been more pleased. W. J. MELLOTT.

## Our Fireside.

## JEALOUSY.

There's a fearful tyrant roaming  
Up and down this little world,  
And where'er he gets a lodging,  
Thickly, envious darts are burled.  
Eyes see through no rose-lit lenses,  
Ears convey no well meant word;  
But with senses all perverted,  
Every ugly passion's stirred.

If he stops beside the hearthstone,  
He will vent his bitter ire,  
Till upon its sacred altar  
Fiercely burns unballowed fire  
Until every tie is severed  
Which binds heart to kindred heart,  
And from home's once happy shelter  
Peace will evermore depart.

Who, that's seen this evil monster,  
Who, that's heard his hateful growl—  
Seen the strife which marks his pathway,  
And his dark and gloomy scowl—  
Would a moment give an entrance  
To their heart for one so vile,  
Banning from its sacred precincts  
Love and charity's sweet smile?

Ob, be watchful; he is going  
Up and down the wide world o'er,  
And where'er he seeks admittance,  
Shut in baste the bosom's door;  
Late, too late, you sit repenting  
At the folly you may see;  
For this fearf'ul, roaming tyrant  
Bears the name of JEALOUSY.

—B. Clinton.

## Ben Fargo's Claim.

BY TOM P. MORGAN.



R. H. P. SMALL, late of Jack Oak, released the cravat handle of the little hand-linking job press, wiped his moist brow, and picking the top paper from the pile, sat down to admire his handiwork. The "runnin' off" of the first issue of the New Boston *Clarion* had been successfully accomplished.

The first number of the *Clarion* was not imposing in appearance, but its editor regarded it with as much pride and satisfaction as if it had been a huge "blanket sheet," instead of being small almost to insignificance, consisting of but two pages, each eight by twelve inches in size, with three columns to the page. This was as large as could be printed on the jobber, the only press that Mr. Small possessed just then, owing to his having become "late of Jack Oak" so suddenly. His stay at the last-named place had not been an extended one, but it had been full of experience for Mr. Small, then late of the East. Among other things he had learned that in border settlements, boom is absolute monarch, and that even journalism, which possibly in the "effete East" may mold public opinion and make and unmake whom it will, must be subservient to king boom. This had been forcibly impressed upon him by a self-appointed committee of wrathful citizens.

The course of his paper had been such that the failure of a certain cherished enterprise for the advancement of the boom was laid to his charge, and Mr. Small speedily acquired added journalistic experience. He had been visited by this committee, who dumped his large press into the creek, and gave the molder of public opinion ten hours in which to leave the country forever.

Half of that time had scarcely clapped before the editor had loaded his jobber and other material onto a wagon, and had placed the county line between himself and the unapreciative settlement. He had gone to New Boston with his job press and augmented experience, and had found a welcome from its citizens, who considered a newspaper one of the requisites of an embryo city, which hopefully felt itself already big, with a prospective boom. Now, intrenched behind his recently-acquired experience, Mr. H. P. Small felt that he was in no danger of becoming "late of New Boston." He proudly regarded his salutary, which occupied one entire side of the little *Clarion*. It declared the determination of the paper to be found at all times wholly for the advancement of New Boston and the boom. In it the editorial "we" appeared a generous number of times, and to the whole was appended the editor's name, HERCULES P. SMALL.

The salutary apologized for the infantile proportions of the paper, worked in a pleasure in regard to the journalistic infant having plenty of room in which to grow, and promised much for the next issue, when the new press should arrive. A paragraph said that the press was already on the way, and was expected to arrive almost immediately. Even then, in all probability, it had been turned over to the freighters at Metropolis, where the railroad ended. The reverse of the *Clarion* presented an editorial laudatory of New Boston, a column of complimentary mentionings of prominent, well-known and prosperous citizens—the adjectives impartially distributed—and several items of news. Said one of these:

"Just as we go to press (how dear to the heart

of provincial journalism is this 'just as we go to press!') we learn that Ben Fargo's claim has been jumped again. Ben's return is expected to-day or to-morrow, when we predict that he will attend to the eviction in his usual prompt and thorough manner. We will chronicle particulars in our next issue."

No faint could have been found with this item, except, perhaps, that it was a trifle verbose, and might have been a little indefinite to the uninitiated reader. New Boston fully understood it, and had heard the news even before it reached Editor Small. And taught by the past, when Mr. Cyrus Hickson, the mail-carrier, brought the news, the settlement felt already apprised of what would follow.

"Who's jumped it this time?" asked Colonel Pride, as Cy Hickson retailed the news to the "prominent" citizens lounging on the porch of the Eureka general store.

"Dun know," answered the mail carrier. "Didn't stop to find out; but I seed enough as I rid past to know that Ben Fargo's claim was jumped agin. Smoke was comin' out o' the shack, an' a scan'lous-lookin' linch-pin wagin' a pair o' rickety ole mules was standin' by."

"Waal," predicted Colonel Pride, "about five minnutes after Ben gits there, them rickety mules'll be pullin' that scandalous-lookin' wagin away from that claim at double-quick time."

"You bet!" agreed some one. "Ben's got so's he don't let 'em stay long."

"Pears like Ben Fargo's claim is allns bein' jumped," said another.

"Yes, an' unjumped, so to speak, just as often," spoke Colonel Pride. "It nset to be that he'd try strategy or moral suasion, but ouw he comes to the point at once."

"Had to laugh th'other day, as I was ridin' past," said Mr. Cy Hickson. "Feller from Mizzury'd jumped the claim that time, an' was makin' himself as comfortable as you please, bakin' a johnny-cake in Ben's skillet, an' over the fire he'd kindled from the coals Ben'd left early in the mornin'. 'Five minutes to git your johnny out o' my skillet,' says Ben. 'The year 1901 will find me right yere,' says Mizzury. Says Ben, 'This is my claim, an'—' 'Mebby 'twuz 'fore I jumped it,' broke in Mizzury, turnin' over the johnny-cake. 'Yes, 'n' 'twill be agin soon's you nujump it, which'll be in 'bont three minutes,' says Ben. 'Crack yer whip,' says Mizzury; 'I'm able fer you I reckon; 'sides, the law's on my side, an'—' 'Hang the law!' broke in Ben, and sailed in. They 'tangled, an' in about two minutes Mizzury found he'd made a mistake. Fer awhile I 'lowed Ben'd drive his head into the ground. Then, after tunkin' him around awhile, Ben sat on him. 'Whose claim's this now?' says Ben. 'Your title to it 'pears to be a mighty strong one,' says Mizzury. A little later Mizzury had his team hitched to his wagin, an' was a-eatin' his johnny-cake as he driv away."

As has been said, it seemed as if Ben Fargo's claim was being jumped with a regularity that was only equaled by that with which Fargo speedily removed the jumpers. There were several reasons for this frequent jumping. One was that the claim was one of the most desirable in the county, and also one of the easiest to jump. It was handy to New Boston and to the grass-fringed road that led thereto. Then, too, its champion but partially complied with the law for such cases made and provided. During the greater part of the time he did not visit the claim at all, except when there was another jumper to eject. He had made none of the improvements that the law required. Even the "shack" cabin upon it had been erected by one misguided claim-jumper, who had been speedily and forcibly ejected by Fargo, who had retained the cabin for his trouble. But in spite of the continued jumping, Ben Fargo continued to hold the claim against all comers. He was not a quarrelsome person, but simply chose the easier of the two ways of retaining possession of the claim.

Claim-jumping consists in moving onto the claim of some one who has not yet secured from the government a title to the land. The legal measures then instituted by the jumper drag their slow way along for an indefinite period after that, and the costs go on piling up in a way that makes the existence of so many lawyers in the newer states possible. Then, if the jumper can prove that the jumped has not complied with all of the requirements of the government, the right to remain, and finally a deed of the land, are given to him. If he fails, he gets nothing but an opportunity to pay the small mountain of costs, while the other regains possession of his claim. That is the painfully slow legal way, and one that Ben Fargo never employed.

In the claim country the law is often regarded as being more ornamental than applicable, and the elastic public conscience considers it complied with sufficiently when the claimant makes a few improvements, and exhibits an intention of residing on the claim at some more convenient season. And the swift eviction of a claim-jumper and the throwing after him of his few possessions are regarded with complacency by the community at large.

Mr. Ben Fargo, returning to New Boston the day following the one upon which the news

had reached the settlement, became aware that his claim had been jumped long before he reached it. The presence of the old, linchpin wagon and rickety mules told him that.

"Well," he said, half aloud, "I am in something of a hurry to get to New Boston, but I reckon I can spare time to kinder start this jumper on his way. Not overly well fixed," he commented, as he left the road and drew nearer. "Wagon don't look safe, and the mules seem mighty rickety. But they brought the jumper here, and they've got to—Hello, here!"

The presence of the object that he had almost ridden over surprised him a good deal more than did the presence of the jumper. It was merely a little grave, roughly rounded up in the midst of the long, prairie grass. The clods of the ragged, little mound showed that it had been there only a short while. Sun and rain had not begun to pulverize them. A tattered, little, prairie rose-bush had been planted at the head of the tiny mound. The tips of its leaves had withered, and the blossoms it had borne at transplanting were yellow and shrivelled; but one small bud had opened that morning, and the ragged, little flower, striving its best to be bright and pure, lay on one of the rough, black clods of the ragged, little grave.

"Baby!" Fargo muttered.

At that moment a woman left the shack and came toward the grave. In her hand she bore a cup of water. Her eyes were swollen with crying. Fargo gave a start of surprise as he saw her face. Scarcely glancing at him, she returned his salutation, and bent and watered the ragged, little rose-bush.

"Your baby?" Fargo asked, presently, feeling awkwardly that he ought to say something.

"Yes," the woman answered, chokingly. "She was all I had—all I had! And now she—" And she flung herself prone on the grave, as if to embrace the little mound, and sobbed aloud.

Fargo looked uncomfortable. "Now don't cry so. I—yo—where's your husband? In the shack?" he blurted.

"No," lifting her face from the clods. "He died four weeks ago, and with my few belongings in the old wagon I started on the long journey back to the dear old home state. The baby—well, I dug the little grave myself. I had no coffin, no money to buy one, and I buried her in her little, white nightgown." A tear dropped on the blossom of the ragged, little rose. "I cannot go on yet—yet. And oh, it seems as if I never could go on and leave my baby here alone in the midst of the prairie! May be the owner of this claim would not object if I lived in the shack a little while, till—till—" Fargo squirmed about uneasily in his saddle. "Then, after a little time, I suppose I must start back toward the old Indiana home, and leave my baby here in—"

"What part of Indiana?" Fargo blurted.

"Champion county. The little, cross-road village below Fountainville. Oh—"

"Ever know a damed fool there by the name of Fargo?"

"Ben Fargo? He wasn't a fool, though. He—"

"Yes, he was, too. Got mad at nothing. Ought to have been shot on the spot."

"No! He—we—"

"Mary, don't you know me?"

"Ben Fargo!"

"Yes; a damed fool. Got mad at nothing."

A little later Ben Fargo's horse, whose master had tied him by gathering a number of iron-weeds into a bunch and looping the bridle rein over them, looked on complacently as the proprietor of the claim, with a piece of board left by the dispossessed builder of the shack, was smoothing up the little mound that covered the child of the person who had jumped his claim. And the jumper, sitting on the grass near by, and fashioning a wreath of wild roses for the little grave, looked a trifle less grief-stricken than before.

When, later, Mr. Ben Fargo was passing the Eureka general store in New Boston, he was stopped by Colonel Pride, who sat on the porch.

"Did the jumper cut up rusty, Ben?" asked the colonel.

"Nope." Fargo answered, shortly, moving away.

"Go without trouble?"

"Nope," more shortly.

"Reckoned he was able fer you?"

"Nope," farther away.

"Waal, then, what did—"

"Nothing. There yet." Fargo turned the corner.

There was a diversity of opinion among the prominent citizens congregated on the porch of the Eureka general store. Some believed that the jumper must have been victorious in the fight that was supposed to have ensued when the eviction was attempted. Others were darkly of the opinion that Ben had severely injured or possibly assassinated the jumper. This would account for his being "there yet."

They even talked a little of investigating, but then it was really none of their business, anyhow. If the jumper had been misused, he had only got what he deserved, and, besides, it was not wholly policy to interfere too much with complacency by the community at large.

Mr. Ben Fargo, returning to New Boston the day following the one upon which the news

from New Boston, saw the smoothing of the baby's grave, and marveled thereat. When he returned from the trip, a day later, he retailed the news to the prominent citizens on the porch of the Eureka general store.

"Waal, I'm beat," announced Colonel Pride.

"Me too," agreed several.

The attempt to interview Ben Fargo when next he appeared was not a brilliant success. That personage informed them, first, that whatever occurred at his claim was the business of no one but himself, and second, that he was both able and willing to thrash any man who desired to make it his business. For some time thereafter the citizens who were in the habit of congregating at the Eureka general store imitated the example of the legendary parrot of the mythical sailor, which tradition declares said very little, but indulged in a tremendous amount of thinking.

It was some time before Mr. Hercules P. Small had an opportunity to chronicle in the *Clarion* the events which followed the last jumping of Ben Fargo's claim. Before the arrival of the next publication day he broke the little, hand-linking jobber while "running off" stray-bills, and it could not be used till a duplicate of the broken part could be obtained from the foundry. The large newspaper press did not arrive as expected, and the second issue of the *Clarion* did not appear on time. Anxious inquiry brought the reply that the press had been shipped promptly, and later had been turned over to the freighters at Metropolis, where the railroad ended. It was courteously hoped that the press had arrived before the receipt of the letter of explanation, and so forth. But still the press did not come, and the second issue of the *Clarion* did not appear. Hurried correspondence instituted an investigation, but no trace of the press could be found. It had totally disappeared somewhere between Metropolis and New Boston. The freighters who had taken charge of it at the point where the railroad ended could not be found.

More than one repetition of the publication day passed by without the appearance of the *Clarion*. In his excitement at the loss of the large press, Small had forgotten to order a duplicate of the broken part of the jobber. Finally, a clew was struck which led to the discovery of the press in the possession of an enterprising but unscrupulous journalist, who was cheerfully preparing to begin the publication of a paper in a tiny settlement about half way between Metropolis and New Boston, and which hopefully expected to sometime become a town. This enterprising person, upon meeting the freighters and learning what brought them thither, and also their burning desire to seek pastures new, hastened to inform them that he was Mr. Hercules P. Small, and that having decided to locate at the tiny settlement instead of at New Boston, he would relieve them of the press there. They were not regular freighters, but "movers," who had been employed because they were going in that direction anyhow, and would do the work for a fraction of the regular charge. Not being acquainted with that kind of business, they gladly gave up the big press and departed for their chosen destination.

The rightful owner of the press possessed himself of it in much the same manner that Ben Fargo had been wont to repossess himself of his claim. Several prominent citizens assisted Mr. Small in getting his press, and in a short time it was in the little office at New Boston, and the second issue of the *Clarion* was being "run off." In speaking of the enterprising journalist who had been deprived of the press, an editorial gravely expressed the belief that he had not, at the time of going to press, stopped running in headlong flight from a community that had been made excitingly warm for him. In another part of the paper was a notice:

"Married, by Rev. Mr. Prouty, at the claim given to the bride by the groom, Mrs. Mary Stone and Mr. Benjamin Fargo."

The *Clarion* declared itself as joining the many friends of the happy couple in wishing them all manner of blessings, and expressed unbounded gratitude for a huge hunk of wedding-cake, the handiwork of the bride.

"Waal," commented Colonel Pride, "that was one time that Ben Fargo's claim staid jumped."—*Harper's Weekly*.

## MICROSCOPIC ENEMIES.

The experiments of modern physicians and scientists have established the fact that many of the germs of disease enter the human organism by the inhalation of air laden with these bacteria or microbes. As their name imports, they are very small, but their work is deadly. Still, many of these are harmless to a person in health. But if any organ is diseased, it is first attacked. The experiments of Pasteur, Koch and others have shed much light upon this important subject. Up to the present time these researches have benefited science more than humanity, and have proved very destructive to dogs and rabbits. Meanwhile, the "expectant public" are allowed to derive all the comfort possible from this addition to their store of knowledge. As we can do so little to destroy these minute enemies, the most natural and sensible course to take, it seems to us, is, to strengthen and revitalize the system, so as to enable it to repel and resist their destructive influence, and it seems also very appropriate that the vitalizing element should enter the system through inhalation. Such a vitalizer is Compound Oxygen. But examine the evidence and judge for yourself. If you wish to do so, send for our brochure of 200 pages, a Treatise on Compound Oxygen, and giving accounts of many remarkable cures in the most obstinate chronic cases. Sent free. Address Drs. STARKEY & PALEN, 1529 Arch St., Philadelphia, Pa., or 120 Sutter St., San Francisco, Cal.

## THE RICHEST WIDOW IN AMERICA.

Never has there been such universal church-going in New York as during the present season. I saw a lady in black step out of a handsome mourning carriage in front of St. Thomas' church, last Wednesday afternoon, and some one told me that it was Mrs. Moses Taylor, who, with Mrs. W. H. Vanderbilt, shares the honor of being the richest widow in America. She is a member of the Presbyterian church, but is subject to no bigotries and finds pleasure in occasional attendance upon Lenten services in Episcopal churches. Church-going is one of her favorite pursuits at all times, and down at Long Branch she has a private chapel and chaplain of her own, who ministers to her spiritual needs during her summer sojourn. This chapel cost her \$70,000, is attended by quite a large congregation of the local Presbyterians and is the center through which she distributes her many beautiful and lavish charities. It was a great surprise to her, upon her husband's death, to find herself so rich a woman, for he never talked to her about his business, and though she knew he was a wealthy man, she had formed no calculation as to the amount he was worth; no one, indeed, not even his executors, had credited old Taylor with more than half a dozen millions at the most, and the surprise of the latter was great on the appointed day, when they and the widow went to open the doors of the particularly solid vault which the old man had built into the wall of his office.

The innermost compartment was large enough to hold certificates of stock and the like securities without folding. There was a great stack of these papers lying neatly on top of each other, un wrinkled and uncreased. They represented Taylor's investments in railroads, banks and insurance companies, deeds of real estate and every sort of sound financial venture. The widow did not comprehend the full meaning of this great pile of documents but the executors looked at each other with pleased significance, and set about making an inventory, jotting down figures on the back of a card, and announcing in awed tones to the widow, when this pleasing task was done, that she was the sole possessor of a fortune amounting to \$40,000,000. She bore it with that meek and gentle resignation of which even the worst of us would be capable under similar circumstances, and many unfortunates have since had reason to be grateful that this great sum fell into such discreet and charitable hands. Mrs. Vanderbilt is also a faithful church-goer, having pews in several different churches, one of her favorite places of worship being old Trinity.—*Brooklyn Eagle*.

## THE COUNTRY GIRL.

A country girl always has an idea that the advantages of the city girl are not hers—that she suffers from a lack of something—she doesn't exactly know what. She is convinced that the girl in the city avails herself of every opportunity to look at fine pictures, read choice books and cultivate her mind. Now, when she generalizes in this way she is simply showing herself to be narrow and ignorant. The girl in the country to-day can get exactly the same papers and books that come to the girl in the city. Her thinking hours are longer, and very often she sees more of real, sweet home life. She is apt to learn that most beautiful industry, how to be a good housewife, and over the bread-pan or the churn she can think as great thoughts as she would over the elaborate fancy work or in the picture gallery. She can study flowers as they grow; she can breathe the good, pure air of heaven, which makes a healthy body—and that usually means a healthy soul—and she can learn whatever she wishes. Intellectually, she can control herself, and she may know, in books at least, the best trained and finest minds of the century. Here, there is no danger of her learning to speak slang. Among these people virtues are respected and vices are condemned, and she is thrown into society which she will never regret and which will always be a credit to her.

Do you know, you girls in the country, that you can smell the flowers and gather them, while we in the city look at them with the glass of the florist's window between us. And a bought flower never has the charm possessed by that which is plucked by one's self. If there is anybody to envy, it is the girl in the country.—*Ladies' Home Journal*.

## EAT BEFORE GOING TO BED.

Most students and women who are troubled with insomnia are dyspeptic, and they should therefore eat before going to bed, having put aside work entirely at least an hour before. If they are not hungry, they should simply be instructed to eat; and if they are hungry, they should eat whatever they want, says the *Journal of the American Medical Association*. A glass of milk and a biscuit is sometimes all that can be taken at first, or a mashed potato huttered. If possible, the night meal should be taken in another room than the sleeping apartment, and for men in the city it will be found advantageous to go out to a restaurant. Before eating, however, a bath should be taken, preferably cold or cool, which should be given with a sponge or stiff brush, and the body thoroughly rubbed off with a coarse

**ENLARGED PHOTOGRAPH \$3** **CRAYON PORTRAIT \$4.75**

Size, 12 by 15 Inches.

Frame, 21 $\frac{1}{2}$  by 24 $\frac{1}{2}$  Inches, of 5-Inch Molding,

Including this Paper One Year.

Size, 18 by 22 Inches.

Frame, 32 by 36 Inches, of 8-inch Molding.

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When mailing the photograph or likeness from which the portrait is to be copied, be sure that it is well protected, by putting it between two pieces of heavy cardboard before inclosing in envelope, and put on a 2-cent stamp for each ounce or fraction of an ounce, and do not fail to give your complete address, with name of express station if it is different from your post-office.

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FARM AND FIRESIDE, Philadelphia, Pa., or Springfield, Ohio.

towel afterward. The bath need not be more than five minutes in duration. Further than this, the patient should go to bed at the same hour every night, and arise at the same hour every morning. There is a popular superstition that grown people should not eat immediately before going to sleep; that it will give them indigestion or nightmare, or both. The writer cannot see why adults should be so very different in this respect from babies. The average person should be in bed seven or eight hours, which is time enough for the digestion of almost anything edible. In our American life, he thinks, the digestion carried on through sleep probably has the better chance for thoroughness.

## TO STOP A RUNAWAY HORSE.

Professor Gleason, noted as a tamer and trainer of vicious horses, thus explains the manner of stopping a runaway horse by using nothing but a straight bar bit and lines: For instance, your horse attempts to run away. Let him go for a distance of fifty yards; then haul in your lines perfectly tight. When you

get ready to give the command to stop, say "Whoa!" at the same time you pull the right-hand rein, giving a powerful jerk, and repeat the word whoa. Don't move the left hand, but do all the work with the right. When you give the terrible jerk, twist the horse's jaw to the right, and if you have the presence of mind to repeat the word whoa at the second jerk of the lines, you will be surprised to find your horse standing still.

## CURIOSITIES OF THE POSTAGE STAMP.

There are about 6,000 varieties of postage stamps now in use by the different nations of the world. The museum of the Berlin post-office alone contains a collection of between 4,000 and 5,000 specimens, half of which are European and the remainder divided between the Americas, Asia, Africa and Australia. The emblems upon the stamps of nations are legion; the earth, the sea, and the vaulted canopy above us have been ransacked for curious and meaningless devices and legends. The entire animal kingdom, the stars, and the moon in all its phases, besides legendary

emblems by the thousand, are known to the collectors of stamps, who pride themselves upon being "philatelists." Upon the printed faces of these little squares of paper may be found the effigies of five emperors, eighteen kings, three queens, one grand duke, several inferior title rulers, and many presidents. M. Phillippe de Ferrari perhaps has the largest and most valuable collection of stamps in the world, amounting to something like 250,000, and within the present year he sold one single little stamp to a collector in Paris for \$50,000.

## ON THE SAME DAY.

"I picked up a hit of information the other day," said a hotel clerk, "that I hadn't thought of before. A couple of men were talking in the office, when one asked on what day of the week Christmas will be this year. 'Let's see,' replied the other, 'I was married on the first day of May; that was Wednesday. Christmas will come on Wednesday.' That struck me forcibly, and when I got a little leisure I gathered up a lot of old calendars and investigated it. I found that it is true that the first day of May and Christmas of the same year occur on the same day of the week."

## Our Household.

## HOME TOPICS.

**C**HICKEN IN JELLY.—Boil a fowl until the bones can be easily removed, season it with salt and pepper after it begins to get tender, adding a little sage, also, if it is liked. After taking out the chicken, let the broth boil down to a little less than a quart, strain it, and, when cold, remove all the fat. Cut the white meat into strips and the dark meat into dice. Boil four eggs hard and slice them thin. Dissolve half a package of gelatine in one cupful of cold water. Heat the broth and add the dissolved gelatine with a pinch of mace. Put the meat in a mold, mixing the light and dark, and a layer of egg slices between. Let the broth become nearly cold, then strain it over the chicken and put the mold in the refrigerator, or as cool a place as possible, that it may harden. This is a very pretty and delicious dish for lunch or tea. When ready to serve, dip the mold into hot water for a minute, that it may slip out easily. Cut it in slices and garnish the plate with sprigs of parsley, or nasturtium leaves and flowers.

**COTTAGE CHEESE.**—This is a healthful and palatable dish, and ought often to be found on the farmer's table. Many farmers' wives and daughters add to their supply of pocket money by furnishing families in the city with this delicious cheese. To make it, take clabbered milk and heat it over hot water just enough to separate the curd and whey, lay a thin cloth in a colander or sieve, pour in the curd and let it drain an hour or two. After it is drained, season it with salt, and when ready to serve pour good, rich cream over it. This dish, brought from the ice-chest just before tea is ready, is fit to set before a king. I believe I never knew but two people that did not like it, and I have always entertained the deepest sympathy for them.

**TEMPERANCE WORK.**—During the summer months, when work in farmers' homes is heaviest, it does not seem possible to do anything in the temperance work. Many women are already so overburdened that they are almost ready to despair. What can such women do to help on the grand work? Our homes are, and should be, our first care, and right here work for temperance can be done. To bring up our boys and girls in strict temperance principles, to teach them self-control, to form in them good habits and to lead them

in the ways of truth and purity is the noblest mission ever given to woman. If possible, have always some good temperance literature on your table for your own family, and any who may come in, to read. Send the same to some careless family where children are growing up without this training. Lose no opportunity to speak a word that may help some tempted soul to resist the tempter, or that may set the thoughtless to thinking. If it is not possible to spend an hour in the regular prayer-meeting with those who can give their time and strength to the work, you can, at least, sometimes send a little note of sympathy, of hopefulness and encouragement. They need it. Last, but not least, when you carry your own cares and griefs to the Father, ask His aid for those who are tempted and suffering by the demon of intemperance and those who are giving their lives to free humanity from this curse.

MAIDA McL.

## DISH WASHING MADE AGREEABLE.

"I just hate to wash the dishes!" came from such a fretted little face.

"That depends on how you go at it," I replied. "If you had gathered them up right to begin with, they would not look so like a mountain. Go out in the kitchen and get one of the little lard-buckets and put all your silver in it. Put in some borax, ammonia or Pearline, whichever you have, and fill up the bucket with boil-

ing water. By the time your table is entirely cleared off you can wipe the silver and it will look nice and bright. There is something in all soaps that corrodes silver, and you must more often scour it. I banish the soap entirely when I wash dishes.

"Next, wash your cups and saucers in clear, hot water, rinse and wipe. If your plates are greasy, wipe off all of it with a bread crust into a refuse-pan, which can then be fed to the chickens or dog. Then pour hot water over your plates with some one of the three named articles I spoke of before, and wash with your dish-mop or with your hands and a cloth. Rinse them nicely and wipe while hot and they will shine and look nice."

I do not like all sorts of refuse washed into the dish water; the odor is sickening united with any of the domestic soaps. No wonder dish washing is so repulsive.

When it comes to pots, kettles and skillets, put them on the stove to keep hot, put a little baking-soda in each one and some hot water; use your wire dish-cloth to remove all that has adhered to them, and if you haven't one, don't be without one another day, as they are only fifteen cents and are an immense improvement on scratching it off with an old spoon or your finger-nails. Last of all, get some clean, hot water, make Pearline suds and wash your glasses in it, rinse in hot water and turn upside down on a towel spread upon the shelf to drain them dry. They will be bright and shining.

Ah, my sisters, there are easier ways of doing things than some of you are doing.

tion, and must never indulge in anything unsuitable as frivolous, little, coquettish airs. A little house, as well as a little woman, can wear all sorts of ruffles and kinks, and surprise us with ridiculous, cheap little ornaments which we will admire and say, "how cute!"

The little house I noticed was painted—well, is it possible that I can't tell what color? That is generally the way; when anything is just right we remember its good effect, but find it hard to describe. It was not newly painted, neither was it shabby, but I can't remember the color. There was a small portico over the door, which was in the middle of the house, with a window on each side. These windows were small and old-fashioned. At one end of the house, near the front, was another window still smaller and more old-fashioned, for it was up quite high.

We are all accustomed to hear a person's eyes called "the windows of his soul," because through them the expression of the real man is conveyed. Certainly, windows deserve to be called "the eyes of a house," for they tell us plainly what degree of taste and refinement exists behind them.

When I looked at the windows of the little house, I thought, "Nice folks live there." There were draped lace curtains within, and sash curtains of China silk, partly drawn aside, on the lower half of the windows. Outside were window-boxes, not yet very bright with flowers because the season was early, but reminding one that they would be beautiful in a

It began to rain a little, so I gave up my business and started home. My way lay through the part of town where most of the stores were, and, as I passed a shoe shop, I saw some empty boxes that struck me as being just the thing. I ran in to ask about them. Yes, I could have them, said the woman who kept the shop, and, coming out, she and I began to root around among the boxes and measure the sizes. We found two exactly alike.

"How much are they?" I asked.

"Ten cents apiece," she said.

I bought them, and, looking around, I saw a round-faced, ragged little nigger, who seemed to me a special dispensation of Providence.

"Do you want to earn some money by taking these boxes home for me?" I asked.

He was as delighted to carry them as I had been to buy them and the woman to sell them. We were all happy.

I paid him a dime, so my boxes cost, instead of a dollar and a half, just fifteen cents each. On measuring them to the window, they fit exactly, being twenty-seven inches long, ten inches wide and eight inches deep.

Of course, they had to be painted. I bought half a pint of Masury's paint and applied several coats, but we were just about to have our house painted, so when the workmen came they put on two finishing coats of the same color as the shutters and other trimmings of the house. Let me make a suggestion. If you paint your window-boxes, let them be a very dark, dull red—as near as possible the color of a flower-pot—not one that is brightly, artificially red, but the natural color of the crock slightly smeared with mother earth.

Brackets were the next consideration. We have a store called "Cheap John's," where the prices are always one less than the numbers ending in 5 or 0, so one gets a cent change, and somehow twenty-four cents seems a great deal cheaper than a quarter! I found there large iron brackets at nineteen cents per pair, and bought two pairs. Now, how much is it my boxes cost? Let us count up:

Flowers, 50 cents; empty boxes, 20 cents; small boy, 10 cents; paint, 15 cents; brackets, 38 cents. Total, \$1.33.

When the flower merchant came to get his crocks, I asked if he wouldn't exchange flowers for some empty pots I found in the yard. He agreed, giving me two lobelia plants and half a dozen nasturtiums. The flowers all grew luxuriantly. Imagine how pretty the boxes will be by the Fourth of July! KATE KAUFFMAN.

## PRETTY WORSTED TIDY.

This tidy is knit in stripes. It requires two coarse, steel needles, two skeins of garnet Germantown yarn and one and a half skeins of old gold. Cast on twenty-two stitches, knit across plain, purl back, and so on, until you have knit across ten times. Now just reverse this and knit ten times the same as before. This makes it in rows across the stripe, one row plain, the other purled, and so on, until you have the length you wish your tidy. (This quantity of yarn will make a very long tidy.) Then bind off six stitches, drop two, bind off six, drop two and bind off the last six. Now ravel the stitches dropped to the end of the stripe.

You want three stripes of garnet and two of old gold. Crochet them together and fringe the ends. This makes a very pretty tidy, and any one that knows how to knit the heel of a stocking can knit this. When you crochet the stripes together, have the plain row come opposite the purl; this is easily done, as there is no right or wrong side.

MINNIE A.

Monango, North Dakota.

## BREAKFAST OR SUPPER DISH.

Chop fine cold potatoes and meat left from dinner, add one chopped onion, season with pepper and salt, pour over it a half cup of good vinegar; put in some heated butter and lard mixed, just enough to well cover the bottom of your skillet, then cover tightly while cooking. Serve quite hot.

MRS. INEZ S.

See our Great Offer on page 323.

## AFAEARD OF A GAL.

Oh, darn it all!—afeard of her,  
Of such a mite of a gal!  
Why, two of her rolled into one  
Won't ditto Sister Sal.

Her voice is sweet as the whip-poor-will's  
And the sunshine's in her hair;  
But I'd rather face a redskin's knife,  
Or the grip of a grizzly bear.

Yet Sal says, "Why, she's such a dear,  
She's just the one for you."  
Oh, darn it all!—afeard of a gal,  
And me just six feet two!

Though she ain't any size, while I'm  
Considerable tall,  
I'm nowhere when she speaks to me  
She makes me feel so small.

And should she hear I'm scared of her  
You'll swear it can't be true.  
Oh, darn it all!—afeard of a gal,  
And me just six feet two!

My face grows red; my tongue gets hitched;  
The cussed thing won't go;  
It riles me 'cause it makes her think  
I'm most tarnation slow.

And though folks say she's sweet on me,  
I guess it can't be true;  
Oh, darn it all!—afeard of a gal,  
And me just six feet two.

My sakes! just s'pose if what the folks  
Is saying should be so!  
Go, Cousin Jane, and speak to her,  
Find out and let me know.

Tell her the gals should court the men,  
For isn't this leap year?  
That's why I'm kinder bashful like,  
Awaiting for her here.

## MY WINDOW-BOXES.

When I walk along the street, I never notice the big, expensive houses unless they are built in a very beautiful style of architecture, then I admire them as works of art; but the houses which only look as if they cost a great deal of money and must need a great deal of work to keep them in order are not the kind I look at with interest, because that isn't the kind I live in.

When I see a small, but respectable-looking house, which tells plainly that its inhabitants are nice, but not rich, people, then I look closely, and it's wonderful how many pretty places there are of that kind.

One Sunday, during a walk, I passed a small, frame cottage which struck me as being very tasteful. Houses are something like women; if one is large and majestic, it admits of only massive decora-

tion, and must never indulge in anything unsuitable as frivolous, little, coquettish airs. A little house, as well as a little woman, can wear all sorts of ruffles and kinks, and surprise us with ridiculous, cheap little ornaments which we will admire and say, "how cute!"

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## BLACKBERRIES.

Blackberries are a delicious and wholesome fruit, and, as they grow wild in most sections of our country, are within the reach of almost all country housekeepers, who can use them in many ways while in season, and prepare them with equal variety for winter use. The following are some of the many modes in which blackberries may be served, as well as kept, during the year:

**FRESH BLACKBERRIES.**—Gather fresh blackberries, put in a bowl and sprinkle with powdered sugar. Set on ice two hours. When very cold, serve with whipped cream, sweetened.

**BLACKBERRY SPONGE.**—Cover half a box of gelatine with cold water, and soak for half an hour; then pour over a pint of boiling water, add half a teacup of sugar and stir until dissolved. Mix in a pint of freshly-strained blackberry juice, pour in a tin pan and set on ice until thick and cold; then beat to a stiff froth, add the whites of four eggs, well beaten, pour in a mold and set to harden. Serve with whipped cream.

**BLACKBERRY BAVARIAN CREAM.**—Cover a box of gelatine with a teacup of cold water and stand over boiling water until it dissolves, add a cup of sugar and a quart of fresh blackberry juice, strain into a tin pan, set on ice and stir until it thickens; then add a quart of whipped cream, stir well until mixed. Pour in a mold and set in a cold place to harden.

**BLACKBERRY TAPIOCA.**—Wash a cup of tapioca through several waters and cover with cold to stand several hours. Then set over the fire, add a pint of boiling water and let simmer slowly until the tapioca is perfectly clear. Sweeten a quart of blackberries, stir in the tapioca, take from the fire, pour in a dish, stand aside to cool and serve very cold with cream and sugar.

**BLACKBERRY PRESERVES.**—Pick and prepare the berries, allow a pound of sugar to a pound of berries, sprinkle over and let stand four hours. Put in a preserve-kettle and cook slowly half an hour.

**BLACKBERRY JAM.**—Boil the berries, after mashing, until well cooked, then add half a pound of sugar to every pound of fruit. Cook slowly until clear and thick. Put in jars and seal.

**BLACKBERRY JELLY.**—Put the berries into a stone jar, stand it in a kettle of water, cover the top and boil until the juice is extracted, strain through a jelly-bag, measure the juice, and to each pint allow one pound of sugar. Put the juice in a preserve-kettle, put on the fire and boil, put the sugar in and stir until it dissolves. Put in glasses and set away to cool. The blackberries must not be overripe, as the jelly will never be firm.

**BLACKBERRY MARMALADE.**—Boil the fruit in a little water; when low and thick, run through a colander, add half a pound of sugar to a pound of fruit, and boil until thick and stiff. Put in glasses and cover with paper.

ELIZA R. PARKER.

## RECIPES.

## Good Cookies.

2 cups sugar,  
1 cup butter,  
1 cup sour milk,  
1 teaspoon soda.

Mix soft and bake in hot oven.

## RUSKS.

1 pint milk,  
1 cup butter,  
1 cup yeast,  
1 cup sugar,  
1 egg.

Grated nutmeg and pinch of salt.

Mix stiff and let rise same as for light bread.

MRS. E. A. S.

**DUMPLINGS.**—So many are fond of the old-fashioned stews with dumplings, and many continually fail to have the dumplings light. I'll tell you a secret: Steam them over the boiling meat for one hour, instead of boiling them with it. At the end of an hour, take off the steamer, lift the meat from the soup, which should now be thickened as usual, and the dumplings dropped in the gravy for five minutes before serving. Make the dumplings just as you do soda biscuit, but only half as rich in shortening; cut out and lay

them on a buttered pie-tin and set inside the steamer, which should be covered tight and not opened for one hour after putting over the boiling meat, which should be salted at the time, if fresh.

I have tried, to my sorrow, to squeeze time to three quarters of an hour when hurried, but failed to have good dumplings every one of those times, so give them their hour of boiling over a good fire, and surely you will be delighted with the result.

**ASPARAGUS TOAST.**—Cut the tender part of the asparagus into half-inch pieces and put in a new tin basin or a granite one, and boil in water enough to cover the asparagus, for fifteen or twenty minutes, then turn off the water and replace it with milk and cream, equal parts; if you have not the cream, use all milk and add some butter. Season with salt and pepper, and pour over the toasted bread, laid on a platter or a flat dish. Asparagus should not be cooked in an iron dish, or a tin one that has the tin worn off much, as it injures the flavor.

**KEEPING HAMS.**—As warm weather approaches, hams and shoulders that are kept hanging in the cellar are apt to begin moulding. Bring them upstairs, cut and scrape all the mould away that you can; then wash them thoroughly in warm water, wipe dry, and rub dry salt over the outside. Put them in tight, paper flour-sacks, and hang them away in a dry and cool chamber or stairway. They will keep nicely for a long time.

GYPSY.

## RECIPES FOR CLEANING SILKS.

In an exchange we have found a recipe which seems to be a good and simple way for cleaning any color silk. It says:

"First, take a clean, bright pan, put in it about two quarts of cold water, and into the water drop as many old kid gloves as can be produced; three or four are sufficient, however.

"Let this come to a decided boil, and let it boil until the gloves have first shrunk to the size of a baby's hand and then softened into a pulp. Strain this; add a little more hot water to it, also some ammonia—about a teaspoonful. Put in the silk, piece by piece; wash thoroughly, then rinse in clear water, in which you have put some borax and spirits of camphor. Use light gloves only for light silks, and any color when you are freshening a black one.

"It is said the modus operandi is a far better one than the use of coffee extract, to which the pressing iron adheres. Another way is to use soap bark, putting in a handful to a gallon of water, then dipping the silk up and down in it, but never wringing or squeezing it. Hang by the edge along the line and let drain off until it is dry enough to press. Lay a cloth over it and iron upon that."

## HOW TO CLEAN ZANTE CURRANTS.

Use a colander that has small enough holes so that the currants cannot go through. Place the currants in a colander and set it in a dish of water deep enough to fill the colander nearly full of water. Rub the currants gently between your hands in the water, and the dirt and most of the stems will settle and go off through the holes in the colander. When the fruit is sufficiently cleaned, lift the dish from out of the water, and after draining a few minutes, put in a tin oven or warming closet until the currants are again dried. One may clean a pound or two in a few minutes, and then they are ready for use at any time.

GYPSY.

## A UNIQUE ORNAMENT.

It is made as follows: Sew neatly and quite closely over the outside of the bowl of a goblet (the bottom and stem having been broken off), or any similar vessel, a piece of red flannel, dip it in water, then roll in flaxseed, stand it inverted in a saucer and keep saucer partly filled with water, and presently you will have a cone of green on a red ground. A decoration for center-table or mantle-piece.

Monango, North Dakota. MINNIE A.

**ASTHMATIC TROUBLES, PLEURISY PAINS and Inflamed Throats** are overcome and healed by Dr. D. Jayne's Expectorant—for fifty years an approved stand-by for all Coughs and Colds.

## A GARDENING NOVELTY.

Take a large-sized sponge (a white one preferred), sow it full of oats, wheat, rice or flax, then place it for a week or ten days in a shallow dish, and as the sponge will absorb the moisture, the seed will begin to sprout in a few days. When this has fairly taken place, suspend the sponge by means of a cord from a hook in the top of the window, where it can have the benefit of sun. It will then become like a mass of green and can be kept wet by merely immersing in a dish of water.

Monango, North Dakota. MINNIE A.

## FLORAL QUERIES ANSWERED.

**TREATMENT OF SPOTTED CALLA.**—A correspondent from Montgomery county, Kansas, inquires how to manage the spotted lily. She probably refers to the spotted calla, *Richardia alba maculata*, a plant much like the common calla, except that the foliage and flowers are smaller and the former distinctly spotted. It is a summer-blooming plant and requires the same treatment as the gladiolus.

The plants may be grown in either pots or beds and should be planted two or three inches under the surface, just as you would plant a gladiolus. They will grow in any soil and with any cultivation that will produce the Irish potato. In the autumn, take them up and store with other bulbs.

**LANTANA AND BAY TREE.**—What care and treatment does the lantana require; also the bay tree, a leaf of which I enclose?

Stevens Point, Wis. HENRY MORGAN.

The lantana is a greenhouse shrub, and when encouraged to continue growth, will become a large, tree-like plant. It likes an open, well drained, but moderately rich soil and a warm situation.

Plants that have grown in the window during winter may be bedded out in summer, and if the situation is sunny, the bloom will be free and continuous. In the autumn, cut back the longer branches and place in a pot of suitable size and store in the house where frost will not reach it, or give it a position in the window. Avoid extremes of heat and cold in window culture and water carefully, applying neither too much nor too little water, and the plants will bloom very satisfactorily.

The bay tree is botanically known as *Laurus nobilis*. It is an evergreen shrub from the south of Europe, and hardy in the southern states, but must be protected at the North. If planted, it should be given a light soil and a position where the surplus water will quickly drain off. It might prove hardy at the North, protected with a well sheltered box filled with leaves, as some recommended for roses, but this

would hardly be safe to try, except as an experiment. *Laurus nobilis* is the type of a large order of plants, most of which are aromatic. The aroma of the leaf referred to above was not unlike that of spikenard—*Arelia racemosa*.

GEORGE W. PARK.

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## Our Sunday Afternoon.

## LITTLE THINGS.

A CUP of water timely brought  
An offered easy chair,  
A turning of the window blind,  
That all may feel the air;  
An early flower bestowed unasked  
A light and cautious tread,  
A voice to softest whispers hushed  
To spare an aching head—  
Oh, things like these, though little things,  
The purest love disclose,  
As fragrant atoms in the air  
Reveal the hidden rose.

## WHY ARE YOU NOT A CHRISTIAN?

IS IT because you are afraid of ridicule, and of what others may say of you?

"Whosoever shall be ashamed of me and of my words, of him shall the Son of man be ashamed."

Is it because of the inconsistencies of professing Christians?

"Every one of us shall give an account of himself to God."

Is it because you are not willing to give up all to Christ?

"What shall it profit a man if he shall gain the whole world and lose his own soul?"

Is it because you are afraid that you will not be accepted?

"Him that cometh to me I will in no wise cast out."

Is it because you are too great a sinner?

"The blood of Jesus Christ cleanseth from all sin."

Is it because you are afraid you will not hold out?

"He which hath begun a good work in you will perform it until the day of Jesus Christ."

Is it because you are thinking that you will do as well as you can, and that God ought to be satisfied with that?

"Whosoever shall keep the whole law, and yet offend in one point, is guilty of all."

Is it because you are postponing the matter without any definite reason?

"Boast not thyself of to-morrow, for thou knowest not what a day may bring forth."—*Friendly Greetings.*

## THE HIGHEST GOOD.

Does your soul regard earthly things as the highest, and the business which relates to them as your weightiest employment? Then is your soul like the waves of the sea, which are driven and blown by the wind; it is given up to eternal disquiet and transient change. For manifold and varied are earthly things, and whoever gives himself up to their dominion, his soul is dragged hither and thither in all directions, by hope and fear, by joy and sorrow, by desire for gain and by pain at loss. And how should the grace of the Lord and his peace make their dwelling in such a disturbed soul? Oh, my friends, whatever earthly calling may be allotted to us—however spiritual in its functions, however blessed in its effects—if its employment drive us forward in breathless haste upon life's path; if we think we can never find time to stand still and to think where we are and whither we will go, and to reflect on the heavenly and eternal concerns of our immortal souls; if prayer has lost its power, and the divine Word its charm for us, then we have cast away our life upon a fearful error, upon a fleeting dream; then are we, with all our apparent richness in bodily and spiritual goods, really poor, very poor. We have, like Martha, much care and trouble, but the highest good, which alone gives to our life its worth and significance, is wanting.

—Julius Muller.

## A NORWEGIAN JUDGMENT.

A dog who had been run over by a carriage crawled to the door of a tanner, in the town of Abo. The man's son, a boy of fifteen years of age, first stoned and then poured a vessel of boiling water upon the suffering animal. This act was witnessed by one of the magistrates, and the cruel lad was condemned by the board of magistrates of that town to the following punishment. He was conducted to the place of execution by an officer of justice, who read to him his sentence:

"Inhuman young man, because you did not assist an animal who implored your aid by its cries, and who derives existence from the same God who gave you life; because you added to the torture of the agonized beast, and cruelly murdered it, the council of the city have sentenced you to wear on your breast the name you deserve, and to receive fifty stripes from the executiour."

Were such examples made in our courts, of juvenile cruelty, we should have fewer cases of savage wife-beating, and of the daily conflicts of brutalized men, such as occupy the time of our magistrates and fill our police reports.

## DON'T SCOLD.

Mothers, don't scold. You can be firm without scolding your children; you can reprove them for their faults; you can punish them when necessary, but don't get into the habit of perpetually scolding them. It does them them no good. They soon become so accustomed to fault-finding and scolding that they pay no attention to it. Or, which often happens, they grow hardened and reckless in consequence of it. Many a naturally good disposition is ruined by constant scolding, and many a child is driven to seek evil associates because there is no peace at home. Mothers, with their many cares and perplexities, often fall into the habit unconsciously; but it is a sad habit for them and their children. Watch yourselves, and don't indulge in this unfortunate and often unintentional manner of addressing your children. Watch even the tones of your voice, and, above all, watch your hearts; for we have divine authority for saying that "out of the abundance of the heart the mouth speaketh."

## REST.

When you are so tired as to feel "ready to drop," sit down, comb your hair and change your shoes. This will rest the head and feet and give new strength for the work which at house-cleaning or moving time refuses to be postponed. That lying down ten minutes will rest one much more than sitting down has to be reiterated often for the benefit of those ambitious women who sometimes scorn to rest in this way during the day time, and others who fear that it will be known to their discredit if they so indulge themselves. I once heard Mrs. Lincoln talk upon this topic, and I wish every farmer's wife might have heard the woman who has made housekeeping a study tell how to get rest enough to insure health. It was the wisdom, not of the theorist, but of one who had so nearly overworked as to have found it needful to study means of making good housekeeping possible without slowly killing the housewife.—*New England Farmer.*

## CHARACTER IN THE FAMILY CIRCLE.

Home life is the sure test of character. Let a husband be cross and surly and the wife grows cold and unamiable. The children grow up saucy and savage as young bears. The father becomes callous, peevish and hard. The wife bristles in self-defence. They develop an unnatural growth and sharpness of teeth, and the house is haunted by ugliness and domestic brawls. This is not what the family circle should be. If rude to any, let it be to some one he does not love—not to wife, brother or parent. Let one of the loved ones be taken away, and memory recalls a thousand sayings to regret. Death quickens recollection painfully. The grave cannot hide the white faces of those who sleep. The coffin and green ground are cruel magnets. They draw us farther than we would go. They force us to remember. A man never sees so far into human life as when he looks over a wife's or mother's grave. His eyes get wondrous clear, then, and he sees as never before what it is to love and be loved; what it is to injure the feelings of the loved. It is a pitiable picture of human weakness when those we love best are treated worst.

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It is claimed that there will be considerable falling off in the percentage of deaf people in the Census of 1890, owing to the extended use of the sound disc invented by a citizen of Bridgeport, Conn., named H. A. Wales.

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## THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammonton, New Jersey.

## THE MOST PROFITABLE POULTRY FOR THE FARMER.

**T**HE best fowl for the farmer would be, as with horses, a general purpose one, as most farmers do not breed poultry for show purposes, or keep incubators and brooders for early hatching.

I have had some experience in raising poultry, and now have Plymouth Rocks, Langshans, Light Brahmans and White and Brown Leghorns, and have tried several other varieties. I have found all to have some good points, but were I confined to one variety, I should take the Plymouth Rock as the most profitable fowl for the farmer to keep. For an all-purpose fowl, such as I think would suit a farmer, I am satisfied the Plymouth Rock will fill the bill the best of all. Where there are so many kinds, and all having their favorite breeds, or some particular breed they are accustomed to, it is rather a fine point to decide without being accused of self-interest, or of having stock to dispose of. In this respect I can truly say I have no axe to grind.

The origin of the Plymouth Rock dates back a good many years. I think they were brought from Plymouth, and were bred from single-comb Dominiques, until they are now a distinct variety, although if inbred very often they will degenerate back to the original stock. Poultry fanciers, as a rule, find them a hard variety to breed true to feather. I would like to state, just here, a mistake most farmers are apt to make in using the same male bird from his own flock, or exchanging eggs or cocks from a neighbor; by doing this a few years, a whole neighborhood will have the same stock. It will pay any farmer who raises fowls, no matter what variety, when he goes to some of the numerous fairs, to buy a good male bird from some exhibitor, even if he has to pay what may seem a high price. It will show on the young stock the next year, and do a great deal towards keeping the flock in a healthy condition, and breeders always have a surplus at that time of the year, and a good bird can be bought cheaper than in the spring.

The fowl for the farmer, I would suppose, would be required to have all the good qualities which can be put together in one bird; namely, a good layer, a good sitter, a good mother, and when she has done all this, to be a good table fowl. Now, we know the Plymouth Rocks have this wonderful combination. They are good foragers, and will do a great deal of good if allowed to run in the orchard, or where fruit trees are, in picking up the many worms and insects. Of course, they will do damage if allowed in when the fruit is ripening. They are a bird that will stand considerable hardship. Their combs being small, are not so apt to be frozen, and their legs free from feathers, they do not hold the wet or dirt.

The Plymouth Rock chicks mature early, and command as good a price in the market as any other kind, and better than a good many. They have good breasts when young, and as a fancy breed, the color of their legs being yellow, and their flesh rich, make them a most desirable fowl. While I do not wish to praise the Plymouth Rock up too highly to the detriment of other varieties, for all have some good points, still, we think they will carry out all that has been said of them.

If a farmer kept Leghorns, Minorcas, Spanish Polands or Hamburgs, or any of the non-sitting varieties, he would either have to buy an incubator or buy or borrow a sitting hen from his neighbor, if he wished to raise any chicks. Now, with the Plymouth Rocks, he first has the hen to lay the eggs, then he makes an incubator of her, and after the chicks are hatched he has a portable brooder, which can be placed where he likes. After he has done with all this usefulness, he can then make his Sunday dinner of her. In regard to the eggs, the Plymouth Rock will compare

favorably with any breed as to size, and the color is what most people desire—a nice brown—while all, or nearly all, of the non-sitting varieties lay a white egg.

There are other varieties, such as Leghorns and the Hamburg family, which will lay more eggs in a year, but for killing for market will not bring much more than half what the Rocks will; so that we think the size for market purposes, especially in chicks, more than balances the egg account.

We find the warmer and more comfortable you keep your fowls in winter, the better the returns; and it is at that time of the year eggs are at their highest, and always find a ready sale. A hen cannot be expected to lay well if her feet and comb are frozen, and with a few dollars invested in lumber and tarred paper, almost any farmer can keep his flock warm and in condition to make ample returns for the outlay; and from past experience, considering the amount of money invested in a flock of fifty hens, they will return a larger percentage than any other part of his stock. This may seem considerable of a chicken story, but from actual experience we are prepared to say it is true.

One very essential point in poultry keeping, no matter what variety or for what purpose, you must keep the house clean. The free use of the whitewash-brush on the walls twice a year, and coal oil on the perches and around the nests (movable ones are the best), will keep the red mites in check, and an hour once a week, or oftener, will remove the droppings, which are of great value as fertilizers for grape vines or almost any vegetable or roots, but must be used with caution, as it is apt to burn if applied too freely.

In feeding, two or three things are necessary—a variety of food, pure water and regularity. Where fowls are confined in cold weather, as they should be, we find a good way is to give a mash of bran, small potatoes or turnips fed warm in the morning, and oats, barley or wheat scattered in some straw on the floor during the day, so that they will have to "scratch" for a living, which gives them exercise and helps to keep them in good condition. At night, give a feed of corn, and if the weather is very cold, it is better warmed. If milk can be given, either sweet or sour, it will do them good, or they will relish mangolds, turnips, carrots, apples or anything green, and use it to good advantage when confined in winter. In summer they can help themselves to grass. A supply of sand, gravel or old plaster should always be within their reach; also a box of dust for them to dust in, and if a few barrels have been scraped from the road in the summer you will find it useful in the winter; it will help greatly to keep them in condition.

To have hens lay well in winter, which is the time they pay best, and also the time a farmer has most time to look after them, they must have, as near as possible, all that is required to form an egg. In summer they will find all this themselves if allowed to run at large.

To be a successful poultryman, one should have a liking for the feathered part of his stock, as much as he may have for his sheep, cows or horses. He may also take a liking to some other breed than the Plymouth Rocks, and would perhaps pay more attention to some variety he would choose to favor. Had we been asked to write on our favorite breed, we should have taken the Leghorns; but for answering the purpose herein named, and being confined to one variety, we will again say, the most profitable fowl for the farmer to keep is the Plymouth Rock.

ALBERT VAY.

## CROWDING ON SUMMER NIGHTS.

During the summer, and especially on very warm nights, the hens sometimes suffer severely, if crowded, and secure no rest, to say nothing of the better advantages in favor of lice. Each hen should have one foot of room on the roost, and ten square-feet of space in the poultry-house, or ten hens in a house ten feet square. In winter, as many as twenty hens may be kept in such a house, but in summer the hens require more breathing space, and if crowded too much, will not lay as many eggs as a smaller flock.

## THE GAPES AGAIN.

So many write us for remedies to prevent or cure the gapes, that we are compelled to occasionally repeat some of our admonitions. We will now try to give a few rules in a nutshell: 1. Scatter air-slacked lime freely over the ground occupied by chicks. 2. Put a little of the lime in the drinking water. 3. Should signs of gapes appear, feed the chicks twice a week with stiff corn-meal dough, first intimately mixing a teaspoonful of spirits of turpentine with a quart of the meal. 4. Give a very sick chick a drop of turpentine on a bread crumb. 5. If this fails, then strip a feather, leaving a small tuft on the end, dip it in turpentine, insert the end of the feather in the windpipe, and quickly withdraw it. 6. Feed on clean boards. 7. Never allow residuum of food to remain on the ground. 8. Keep the ground clear of filth. 9. The rich, moist places, such as are favorable to earthworms, are favorable to gapes. 10. Do not mistake lice for gapes, as the big, gray lice on the skin of the heads and necks will often cause the chicks to gasp from weakness. It is not an easy matter to insert a feather down the throats of a large number of chicks; hence, the best wholesale method is to give the turpentine in corn meal, and to use plenty of lime on the ground, as the lime will destroy all germs of gapes.

## ALFALFA FOR POULTRY.

This season we sowed a strip of alfalfa, in order to test it on a small plan, as we were not sure it would thrive. We had never seen it growing before, and knew but little about it. We sowed the seed in April, and by June 1st it was eight inches high. We also began to feed it in June, cutting it and throwing it over into the poultry-yard. As fast as cut off it grows right up again, and becomes thicker. Next year we will have quite a patch of it. Now for the results: We found that the hens will not touch red or white clover if they can get alfalfa. They eagerly run for it, and clean up a mess of it at once. We believe it to be the best green food for poultry known, and suggest that our readers try it next year by sowing a pound of seed by way of experiment. Only new seed will answer, and weeds will kill the young alfalfa. We got our seed from Denver, as Colorado is the home of alfalfa. It is growing on a very light, sandy soil, no manure or fertilizer having been given, but we would advise the use of fine, well-rotted manure, and to sow the seed in rows, so as to keep the weeds down with the hoe until well up.

## LATE CHICKS FOR THE TABLE.

Though prices will soon begin to decline, a few late chicks may be hatched for home use. As it may not be desirable to have them grow to a weight of more than two pounds, it would not, at this season, be unprofitable to allow the sitting hens to hatch out broods. Late chicks are delicacies, and the farmer can have them from April to October by allowing all hens to sit that so desire, using the chicks at home in place of beef.

## SPADE UP THE YARDS.

"Spade up the yards" should be a sign on every poultry-fence. In no other manner can disease be better prevented than by occasionally spading or plowing the yards, and at no season is such work more important than in summer. Before so doing, scatter lime freely on the surface, and then scatter it again over the ground after spading. Lime prevents roup, gapes and cholera.

## TURNIPS FOR DUCKS.

Now is the time to begin with the turnip crop, and while so doing do not forget to put down extra seed in order to raise a supply for the ducks and geese, as nothing is cheaper or better for ducks than cooked turnips with a little bran added. They are easily and quickly grown, and you will find them of valuable assistance during the winter season.

## WHITEWASH WEEKLY.

Once a week go into the poultry-house, clean it out, and with a small force pump, or sprayer, apply thin whitewash to the walls, under the roof, on the floor, and on every portion of the poultry-house. It is

not necessary to use a brush, as it is too laborious, but a watering-pot may be used if nothing better can be had.

## INQUIRIES ANSWERED.

**Young Turkeys.**—Mrs. W. H. R., Carbondale, Ill., asks: "How should young turkeys be fed?"

**REPLY:**—Feed on bread and milk, rather dry, chopped onions, a little meat finely chopped, milk curds, and cooked potatoes. When a week old, give a variety of anything they will eat.

**Cholera.**—H. L. C., Gilespieville, Ohio, writes: "What is the cause of my fowls dying? They drop like they had cholera. I have lost fifty or sixty, and they are still dying."

**REPLY:**—Probably the disease is the cholera. Add a teaspoonful of liquid carbolic acid to three pints of water, and give no other water to drink. Disinfect the entire premises.

**Pekin Ducks.**—A. L. B., Nooksack, Wash., writes: "Please tell me the best way for raising Pekin ducks on a farm of ten acres, plenty of grass and clover, and a small creek about 200 feet from the poultry-house."

**REPLY:**—Give them a roomy house, board floor, and feed them ground grain, moistened, once a day, as with such facilities they will need but little care.

**Brown Leghorns.**—H. J. B., Altoona, Pa., writes: "Please give me the markings of Brown Leghorns. Should their combs drop to one side? How large should a pen be for six fowls?"

**REPLY:**—A Brown Leghorn male has yellow beak, single comb, yellow legs, white earlobes, red hackle, black breast, red back and black tail. Female is dark brown, penciled with lighter brown; comb of female drops to one side. Pen for six fowls may be 10 by 40 feet; house, 6 by 10 feet.

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## Queries.

## READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should enclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query, in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

**Book on Painting.**—I. M. F., Waxahachie, Tex. Get "How to Paint" from S. R. Wells & Co., 737 Broadway, New York City.

**Milking Tubes.**—T. B., Clarksburg, W. Va. You can get tubes for use in cows' obstructed teats from Dr. Wm. Horne, Janesville, Wis.

**Whitewash for Fences.**—K. R., Slate Lick, Pa. Slack good, fresh lime with boiling, soft water. Add one peck of salt to every one half bushel of lime, and apply hot.

**Willow Hedge.**—L. A. M., Jasper, Mich. If the location is suitable, you can grow a willow hedge, but unless it is suitable it will not make a very satisfactory fence.

**Cotting of Wool.**—H. A. H., King's Corners, Wis. Cotting of wool is considered a result of disease, which dries up the yolk glands. It is also attributed to the ammonia arising from uncleared stables. Cotted fleeces are worth very little.

**Moss in Water-Troughs.**—E. G., Pratt, Kan. writes: "What is good to keep moss from rising in a water-trough? We clean it out about every three days, but the moss rises in it and we can't keep it out."

**REPLY:**—With a stiff broom scrub it out thoroughly, using plenty of fresh lime in the water. This will kill the moss, but, of course, after a time it will get in again, when the lime must be used again.

**Tomato Seedlings.**—P. G., Charleston, Mo. writes: "Why do tomato plants from seed which has remained in the ground all winter, produce small fruit, regardless of the large size of the tomato which produced the seed?"

**REPLY BY JOSEPH:**—Simply because it isn't true. Seed of a good variety that, if properly gathered and planted in the spring, would produce good fruit, will not do differently if left out all winter and to sprout right in open ground.

**Salt for Asparagus.**—A. H. V. D., of Mons, Va. asks: "Is it safe to put enough salt on the asparagus bed to kill the grass and keep it down? How much and how often should be applied for the purpose?"

**REPLY BY JOSEPH:**—I have put salt pretty thickly on the asparagus beds before this, emptied the brine of pork and beef barrels into it almost all in one spot, yet never saw that such liberal applications hurt the asparagus. Enough can be put out to whiten the ground, but whether even this would kill all grass and weed growth and keep this down for any length of time is another question. Some of these weeds are as tough and hardy as asparagus, and I have not a very high opinion of this method of fighting weeds. Thorough tillage is by far the more preferable way.

## VETERINARY.

Conducted by Dr. H. J. Detmers. Veterinarian of the Ohio Agricultural Experiment Station, and Professor of Veterinary Surgery in Ohio State University.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should enclose a fee of one dollar; otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 35 King Avenue, Columbus, Ohio.

**Stringhalt.**—J. E. B., Antreville, S. C. Stringhalt is usually caused by overexertion. It is incurable.

**Abortion.**—H. C. C., Sidney, Neb. It is not advisable to breed a mare that has aborted twice in successive years.

**Tuberculosis.**—S. I. B., Moler's Pass, W. Va. It seems your cow is affected with tuberculosis, which, of course, is as incurable in cattle as in human beings. Have her examined by a competent veterinarian.

**Slavering.**—S. N. C., Pearl, Texas. Have her mouth examined by a competent veterinarian, and the cause, very likely, will be found. If not, change the food, and cease to feed dusty clover hay.

**Heaves.**—T. E. F., Brown's Mills, Ohio. Your mare, undoubtedly, has heaves. It seems you have fed too much bad hay. For further information I have to refer you to the numerous answers given in these columns to similar questions.

**Heaves.**—G. R., Maderia, Ohio. Your mare, it seems, has heaves. Dampening don't improve clover hay, nor any other hay. Keep your mare on grass and she may improve, but once affected with heaves there is no recovery. For further information I have to refer you to the already numerous answers given in these columns.

**Mange on Dog.**—H. S. C., Brooksville, Fla. Wash your dog with soap and water, and then with a two per cent solution of carbolic acid, and clean and thoroughly disinfect his sleeping place. Repeat this treatment every five days until the itching ceases. Two or three applications, if thoroughly applied, will prove to be enough.

**Cough.**—W. M., Harpersfield, Ohio. I cannot base a diagnosis upon a single symptom so common to a large number of diseases, as coughing. It may be that your heifer is affected with tuberculosis. Have her examined by a competent veterinarian, and do not use her milk uncooked until a thorough examination has proven her to be free from tuberculosis.

**Stiff in Forelegs.**—M. F. H., Fayette, Wis. If your description is to be taken literally, that is, if you mean to say "stiff" instead of "weak," it is either a simple case of founder or laminitis, and the source of the "stiffness" is in the feet and nowhere else, or it is a degeneration of the muscles. Tell your veterinarian, to make a careful examination of the feet.

**Bog-spavin.**—L. E. A., Minster, Ill. There is no permanent cure; a so-called windgall, or what it appears to be in your case, a bog-spavin, may be reduced in size, but will return

if the causes which first produced it are acting again. If there is no lameness—and a bog-spavin very seldom causes lameness—it is best to leave it alone. For further information I have to refer you to the numerous answers given to similar questions in these columns.

**Lameness.**—M. D., Roselma, Neb. It is impossible to satisfactorily answer your questions without an examination of the animal. It may be that the seat of the trouble is in the hip joint, but even if that is the case, there remain yet several possibilities. So, for instance, it may be a luxation or even a fracture. Hence, if you desire certainty, you will have to call on a veterinarian to examine the animal. Your case, most likely, though, is an incurable one.

**Opacity of the Cornea.**—C. C., La Crosse, Kansas. If the opaque spot is perfectly white or cream-colored, it will be permanent, but if it is a bluish white, it may yield to treatment. In that case you may use an eye-washer composed of nitrate of silver, two grains, and distilled water, one ounce, and apply it twice a day by means of a small, glass pipette, capped with a rubber bulb. Your druggist will show you how to do it. One good drop at a time is enough.

**Enlargement.**—S. E. S., Wartrace, Tenn. writes: "Will you please give some remedy for removing an enlargement on a mule's ankle, caused from wearing a yoke. It is larger than a hen's egg and soft, something like a windpuff. It has been there about three months and seems to get larger."

**ANSWER:**—First, remove the cause, and then you may rub in once every three or four days some biniodide of mercury ointment, composed of one part biniodide of mercury to sixteen parts of lard.

**Lameness.**—E. E. C., Lake Odessa, Mich. Unless characteristic symptoms are given, it is utterly impossible to locate the seat of a lameness without seeing and examining the animal. In your case the seat of the lameness, most likely, is inside of the hoof or in the flexor tendons or suspensory ligament, but the best thing you can do is to have the animal examined by a competent veterinarian. You can never expect a lame horse to get well, unless the same has perfect rest and does not only do no work, but also does not run about in a pasture.

**Spavin.**—W. E. T., Grayport, Miss. I cannot form a definite opinion from your description, but the latter very strongly points towards spavin. Let one man take the horse by the bridle or halter, ready to start on a trot at a given signal; let another man take hold of the foot of the lame leg and raise it upward and forward as far as he can, so as to bend the hock joint to the utmost; let this man keep the foot in that position for a few minutes, and then let a third one start the horse on a trot by giving him a tap with the whip. If it is spavin, the horse will go the first four steps on three legs.

**Chronic Enteritis.**—G. W. H., Stevens Point, Wis. Your cow suffers from chronic enteritis (inflammation of the bowels). The best remedy is to send her to pasture while the grass is yet young and green. If you do this it will at first increase her diarrhoea, and if she is already too far gone it may become fatal to her; if, however, recovery is yet possible, it will cure her sooner than anything else. If it is impossible to send her to pasture, you may give her, twice a day for a few days in succession, about ten grains of nitrate of silver, dissolved in four to five ounces of distilled water. Chronic enteritis, especially if of long standing, is a very obstinate disease, and seldom perfectly cured.

**Swine Plague.**—J. G., Moon's Valley, Miss. Your hogs are affected with swine plague, or so-called "hog cholera." You say it is not hog cholera because the animals have no diarrhoea. In response to that I have to say, hog cholera is a misnomer, which, if I am not mistaken, originated in 1866 or 1867 in your own state. Separate those yet healthy from all that are diseased, and take them to a non-infected piece of high and dry ground, avoid all communication with the diseased ones, and give those which you suppose may have become infected, every morning for a week or eight days, ten drops of pure carbolic acid for every hundred pounds of live-weight, in their water for drinking. Space forbids to give more detailed directions; I therefore have to refer you to the already abundant literature in regard to swine plague.

**Complaint about Butter.**—E. L., Parkersburg, W. Va. writes: "What is the matter with our cow? She gives four gallons of milk a day and nine pounds of butter a week, but her butter is not fit to use for anything. For some time the butter has not been good. She was fed four quarts of bran and one pint of oil cake in a mash twice a day, and millet and well-cured clover hay all winter. She has been on good grass for two months; she has plenty of good water. She was fresh nine weeks ago and looks to be in perfect health. We have churned the cream when sweet but it does not better."

**ANSWER:**—There is nothing the matter with your cow. Either your stable, your cellar, or possibly your milk and churning utensils have in some way become infected with a fermenting germ. A thorough cleaning, airing, and disinfection constitute the remedy.

**Rye and Corn Cobs.**—I. M. G., Staten Island, N. Y. writes: "I was going to feed my cows and horses rye and corn, ground with cob, but my neighbors told me rye fed to cows, either green or ground with any kind of grain, would produce a miscarriage with all my cows. I was also told that cob, ground with any kind of grain, would kill horses with indigestion. Is this true? What can I do with the rye and corn and cob, and is rye straw, cut with hay, hurtful to cattle?"

**ANSWER:**—Rye may produce abortion if it contains ergot. Corn cobs, being composed mostly of cellulose, are, at best, a poor, uninteresting food for any animal, and not easily digested by horses. If fed to them in considerable quantities they may cause indigestion. Rye straw is good food for cows only if it is intended to make them dry, or to decrease the secretions of milk.

**Umbilical Hernia.**—F. A. M., Seward, Kansas, writes: "I have a sow pig about three months old that has a lump on her abdomen about the navel. It is about as big as a small egg. I think it is a rupture. It does not appear to give her any pain, as she grows and is thrifty."

**ANSWER:**—The swelling is an umbilical hernia. As the pig is only two and one half months old there is yet a possibility that it may disappear when the animal gets older. If it does not, it can be operated at any time by passing a ligature around the hernial sac after a replacement of the intestines has been effected. The operation is easy enough if the animal is prepared for it by a little fasting, and is best performed while the animal is lying on its back. It

is not advisable to breed such a sow, because such an arrest of development—a non-closing of the umbilical ring—is often transmitted to the offspring.

**Chronic Catarrh of the Digestive Canal.**—T. W. F., Wellsville, Ohio, writes: "I have a four-year-old cow that has had scours for nearly three months. I thought she would get better on grass, but she did not. She has a poor appetite, yet seems to be craving food all the time. She has a dropsical swelling under her jaw, but not all the time. When it is swollen, saliva runs from the mouth."

**ANSWER:**—If your cow does not improve, after having been three or four weeks on a good pasture, she probably is beyond recovery. You may give small doses of sulphate of iron, say one to two drachms at a dose—once a day, but must stop as soon as the dung assumes a black color, especially if there is ulceration in the intestines; or, what is still better, but also requires greater precautions, you may give a few doses of nitrate of silver—10 grains per dose—dissolved in a pint of distilled water, or in a decoction of marsh-mallow root.

**A Heifer that won't Breed—Garget.**—E. M., Gorham, N. Y. writes: "What shall I do for a heifer that will not breed?—I have a cow that I turned out all right in the morning, and at night when I milked her the end of her teat was swelled hard and I could hardly get the milk to come. I took a milking-tube and tried to put it in, but it was swelled so I could not, and it hurt her so she threw herself. The swelling is now out, but the milk will not come one fourth as fast out of it as it does out of the rest, and it hurts her so I have to put a rope around her to keep her from kicking. She gives as much milk out of it as any of the rest, but it takes three quarters of an hour to milk her. If I touch her on the end of the teat with my nail or finger she will kick."

**ANSWER:**—Fatten your heifer and send her to the butcher to be converted into beef.—As to your cow, milk her every two or three hours, and, if necessary, use force—compel her to submit. It is the only remedy.

**Probably an Ear-tooth.**—L. B., Boyd, Oreg. writes: "I have a two-year-old mare that has a hard lump at the bottom and in front of her ear, which is running. There is a little tube running from the lump up half way inside of her ear, where the corruption runs out. The lump does not grow fast, but is hard, like bone."

**ANSWER:**—It is probably an ear-tooth, or at any rate an ear-fistule. If you have no competent veterinarian, ask your family physician, or a dentist, to make an incision, to explore the cavity and if he finds a tooth (usually a diminutive molar) to extract it. Then the wound may be dressed with absorbent cotton saturated with diluted carbolic acid. The operation can be performed on the standing animal, provided a good twist on the nose is used. If no tooth is found, the lining of the fistulous cavity may be destroyed by some caustic, for instance, a concentrated solution of sulphate of copper, applied by means of absorbent cotton. The subsequent healing is not difficult.

**Thrush.**—G. B., Buck Creek, Wis. writes: "What will cure my mare of a lame foot? She has been lame more or less for over a year. I am satisfied it is in the frog of her foot. The blacksmith says it is thrush. There is a very bad smelling stuff that can be scraped out of it, but there is no crack that I can find. I have been using tar, lard and blue vitriol, equal parts, but it does not do much good. When she stands she holds up her heel, resting her foot on her toe, but does not set her foot out in front of her."

**ANSWER:**—First, pare away with a sharp knife all the horn that is loose or rotten, and then, while holding up the foot so as to bring the sole in an almost horizontal position, the toe a little lower than the heel, pour some pure carbolic acid on the ulcerated surface and between the frog and sole; keep the foot a few minutes in the same position, but take care that the superfluous carbolic acid does not run off at the heel, but only at the toe, and let the horse step down on a clean and dry floor. That the horse must be kept in the stable, and that the stable floor must be kept perfectly clean and dry, may not need any mentioning. If one application is not enough, another one may be made a few days later.

**Spinal Meningitis—Wauts a Veterinary Surgeon.**—G. C., Springfield, Oreg. writes: "My five-year-old gelding had a severe attack of spinal meningitis in March. He does not improve, but shows weakness with pressure over the kidneys. Is there anything I can do for him, or will rest and time effect a cure? We have no qualified veterinary surgeon in this country. A good surgeon could do well here. A great many horses die here with spinal meningitis or something resembling it. A neighbor lost six head; in opening one he found the spine diseased, the kidneys ulcerated and the coating of the stomach gone. What is most advisable to do in a case of that kind, with no veterinary surgeon to be had?"

**ANSWER:**—As to your first question, I have to say that time, possibly, may effect some improvement, but to give definite advice what to do and what not to do would require an examination. As to your second question, allow me to say that we have this year in our veterinary department of the Ohio State University four graduates, all four excellent young men, who are perfectly reliable and trustworthy. I would advise you to correspond with Harvey Brier, D. V. M., Troy, Miami county, Ohio. If

you can give him any assurance that he will be able to build up a good, remunerative practice in Oregon, I have no doubt he will come to your state. I can vouch for him and say that he will give perfect satisfaction to all who employ him.

**Sore Shoulders.**—J. R., Mendon, N. Y. writes: "We have a horse that seems to be very tender breasted. Every spring she breaks out under her collar, just as soon as we begin working her. She has the same general treatment as my other two, only I try everything I can to heal her, and now, as soon as I begin using her colt, she gets sore. I have never had any other horse that would gall, except these two, mother and colt. Now, is it in the blood, handed down, or will the colt come around all right when she gets more age? Also, what will prevent hair coming in white?"

**ANSWER:**—Keep the skin of the animal perfectly clean, see to it that the collar and all other parts of the harness fit well in every respect, and are kept scrupulously clean, especially where they come in contact with the animal. If the animals, as you say, have naturally a very tender skin, it may be advisable to wash the parts that are apt to become sore, twice a day with a decoction of oak bark, or with a solution of tannic acid. These washings, however, must be begun in the spring, at least three weeks before the animals are put to work. It is also very essential to manage it so that such an animal becomes gradually accustomed to the pressure and friction of the collar; hence, when hitched up the first time, it should only be for light work of short duration. Gradually, but gradually only, the work and the time in harness may be increased, so that the skin may have time to become callous.

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## A RECIPE.

Take a little dash of water cold,  
And a little leaven of prayer,  
And a little bit of morning gold,  
Dissolved in the morning air.

Add to your meal some merriment,  
And a thought for kith and kin,  
And then, as a prime ingredient,  
A plenty of work thrown in.

But spice it all with the essence of love,  
And a little whiff of play.  
Let a wise, old hook and a glance above  
Complete the well-made day.

COSMOLENE is but another name for vaseline.  
The ancients dreaded death; the Christian  
only fears dying.

THE more honesty a man has, the less he  
affects the air of a saint.—*Lavater*.

IN making solution for plauts, first make a  
paste with the Paris green, then put it in  
water.

HUMAN things must be known to be loved;  
divine things must be loved to be known.—*Pascal*.

ENGLISH shepherds find ent cabbage preferable to beets or turnips for sheep. Lambs in  
early winter are especially fond of it.

IT is with flowers as with moral qualities;  
the bright are sometimes poisonons; but, I believe, never the sweet.—*Guesses at Truth*.

HE who gives pleasure meets with it; kindness  
is the bond of friendship, and the hook of love; he who sows not, reaps not.—*Basile*.

AMONG the singnlar differences between the  
two sides of the face, a German professor notes  
that the right ear is almost invariably higher  
than the left.

GIVE your farm credit for furnishing yon a  
home rent free and for a thosand and one  
necessaries and luxuries which you would  
have to pay cash for in the city.

"WHAT a wonderful age of invention it is!"  
said Mrs. Peterson; "I see they are now making  
wire cloth, and I'll have some this very  
week to put a seat in Johnny's - every-day  
trousers."—*Merchant Traveler*.

MAN enters newspaper office. Editor looks  
up in alarm. "My dear sir," says the visitor,  
"I have a bench warrant for your arrest." Editor—"Thank God, it's no worse. I thought  
you had a poem." Man leaves the office with  
the prisoner in mood profane.

THE United States of Brazil are more than  
half the size of Europe, and possess enormous  
capabilities of development. The total area  
of the country is nearly 3,250,000 square miles,  
and it borders on every state in South America  
except Chili. In 1879 the population was  
only 10,000,000; but it has been increased since  
by immigration.

## THE BOX ON THE PLATFORM.

At a dinner station where we stopped one  
day on a certain Tennessee railroad, says a  
writer in the New York *Sun*, almost the first  
sight which greeted the eyes of those who got  
off was a rough burial box on the platform,  
and seated near it was an old, black woman  
with a handkerchief to her eyes. When  
kindly asked the cause of her sorrow, she  
pointed to the box and replied:

"De ole man's in dar."

"Yor husband?"

"Yes; died two days ago, back yere in de  
kentry."

"And what are you doing with the body  
here?"

"I wants to bry it up at Charlestown, bnt I  
hant got money 'nnf to take it on de rail-  
road."

"What nonsense!" exclaimed a man, as he  
came forward. "What's the difference where  
a nigger is buried? They want her to bury it  
here, but she won't. She's determined to take  
it to Charlestown."

"For what reason?" asked the passenger  
who had put all the previous questions.

"'Kase, sah, all de fo' chill'n is buried np  
dar', an' his mudder an'sister, an' de poo' ole  
man will be lonesome down yere."

"What hosh!" growled the kicker.

"Look here!" whispered the other, as he  
went over to him, "I'd rather be a nigger with  
ber soul than be a white man with yours! She's right. Let the family dead sleep to-  
gether."

He entered the express office, paid for the  
shipment of the body, bought the widow a  
ticket to Charlestown, and then dropped a \$10  
gold piece in her hand and said:

"Give him a decent funeral, mammy, and this  
will put up a headboard to mark the  
grave."

"May the good Lawd bess yon for—!"  
Bnt he hurried in to snatch a bit to eat.  
While he was gone I made inquiries as to his  
identity, and finally found a man who replied:

"Why, that's Col. Blank, of Alabama. He  
owned over three hundred Negroes when the  
war broke out."

## WIFE-BEATERS IN THE CITY.

A detective at a police station said: "It is not often that you hear of a man in the country beating his wife. That pastime seems to be reserved for city men. The public doesn't know one third of what is going on in this line. We don't give all of the complaints away. Of course, the harder cases get into the police courts, and the reporters air them; but there are so many cases which are hushed up only to break out again. There are women who occupy good social positions whose husbands, from some cause or other, become brutal and beat them like slaves. The woman doesn't make any complaint herself, for she is ashamed to. But some of her friends stand it as long as they can, and then come down here and report. An officer is detailed to go and see the family. Nine times out of ten these women, who are black and blue, appeal for the brutes who made them so, and the man plays the baby and begs. Any man who will whip a woman is a coward, and as soon as he sees an officer he weakens. The best remedy, in my opinion, for wife-beating is the whipping-post. But you would open your eyes if I told you some of the names we have on our books who are in the habit of indulging in this pastime."

## SLIPS OF THE TONGUE.

The list of words, phrases and expressions  
to be avoided by the young ladies of Wellesley  
college, includes the following:

"I gness so" for I suppose so or I think so.

"Fix things" for arrange things or prepare  
things.

The use of "ride" and "drive" interchangeably.

"Real good," or "real nice," for very good or  
really nice.

"I have studiend some" for studied somewhat,  
or "I have not studied any" for not studied at  
all.

"Not as I know" for not that I know.

"Try an experiment" for make an experimen-

"Had rather" for would rather, and "had  
better" for would better.

"Right away" for immediately or now.

"Well posted" for well informed.

"Try and do" for try to do and "try and go"  
for try to go.

"It looks good enough" for it looks well  
enough, or "does it look good enougn" for does  
it look well enougn.

"Somebody else's" for somebody's else.

## MEN ARE VAIN, TOO.

"Talk about the vanity of women," said the  
photographer, "you ought to work in a gallery  
and note the vanity of men. Women are no-  
where in comparsion."

"Indeed."

"Why, a woman will come here to have her  
picture taken—that's the way they put it—and,  
outside of a good deal of chattering, she's  
as easy to handle as a marble statue; but a  
man—well, he's different. The homlier he is  
the handsomer he thinks himself, and the  
way he will kick about position, and light,  
and shade is enough to make a man give up  
the business and drive a horse-car."

"Are they all alike?"

"Pretty nearly. There isn't much of a much-  
ness between them. I'd sooner take a whole  
invoice of babies any time than one man who  
thinks himself pretty and even admires the  
wart on his nose."—*Philadelphia Inquirer*.

## HINTS FOR THE CHILDREN.

Never be late at meal hours.

Never interrupt any conversation, but wait  
patiently your turn to speak.

Never sit down at the table or in the parlor  
with dirty hands or tumbled hair.

Never reserve your good manners for  
company, but be equally polite at home and  
abroad.

Never call to persons upstairs or in the next  
room; if you wish to speak to them, go quietly  
where they are.

When you are told to do or not to do a thing,  
by either parent, never ask why you should or  
should not do it.

## THE CLOVE CURE.

She was talking confidentially to her bosom  
friend.

"Now that we are married," she said, "John  
has stopped drinking entirely. I have not de-  
tected the odor of liquor about him since our  
wedding day."

"Was it difficult for him to stop?" inquired  
the bosom friend.

"Oh, no; not at all. He just eats cloves.  
He says that is a certain cure."

## SUNDAY SLEEPINESS.

"Yor husband appeared very dull and  
sleepy in chnch last Sunday."

"Yes, he'd had a very exciting and wakeful  
afternoon and evening the day before."

"Where was he?"

"At a base-ball match."

## A WOMAN OF RESOURCES.

Poet (in despair)—"Wife, the wolf is at the  
door. What shall we do?"

Poet's wife—"Go up on the second floor, lasso  
him with the clothes-line and we'll cook him."  
—*Life*.

"May the good Lawd bess yon for—!"

Bnt he hurried in to snatch a bit to eat.

While he was gone I made inquiries as to his

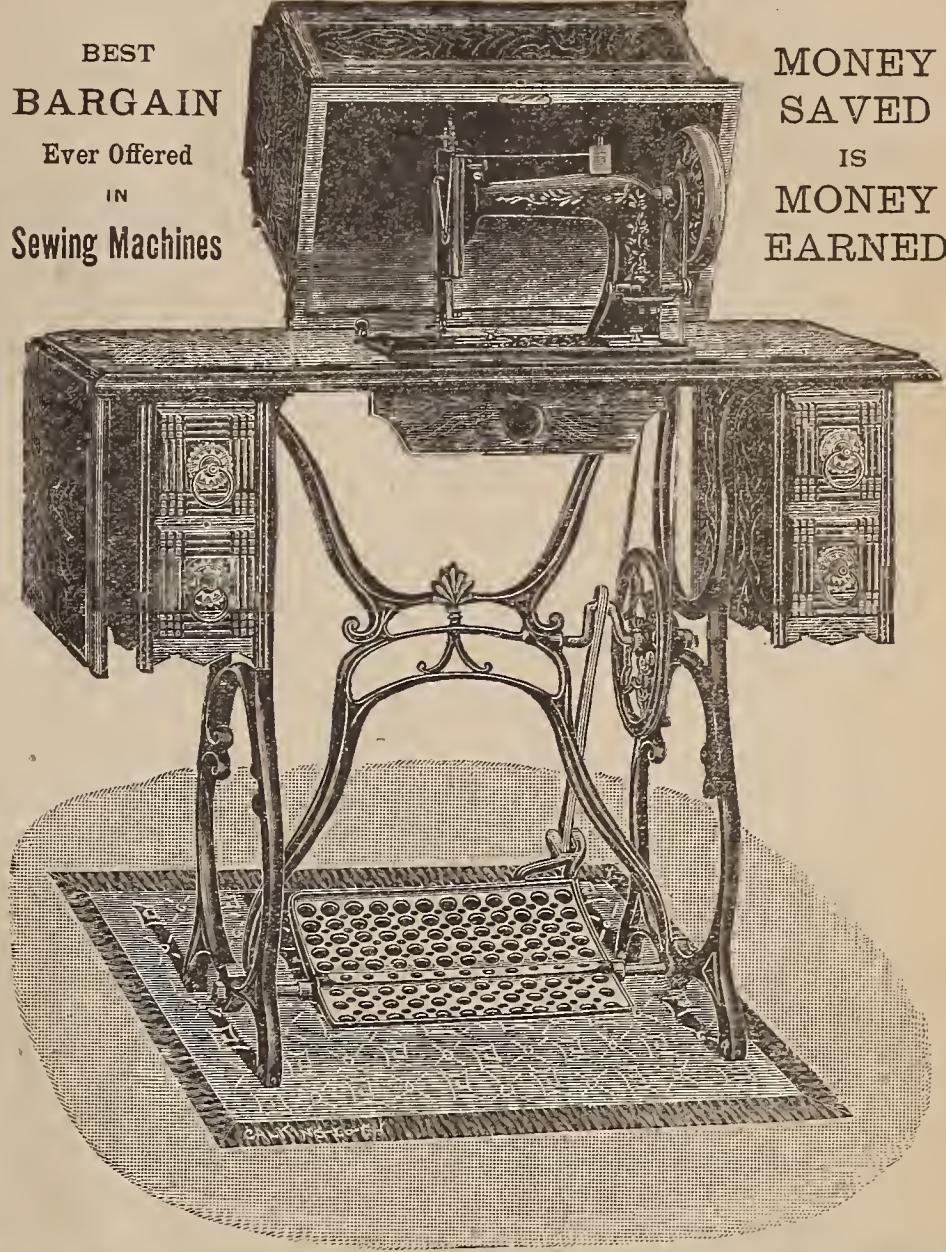
identity, and finally found a man who replied:

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1 TUCKER.	1 WRENCH.	1 GAUGE SCREW.
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1 CHECK SPRING.	1 BINDER.	1 INSTRUCTION BOOK.
1 THROAT PLATE.	5 BOBBINS.	

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CANADA.—(Experimental Farms, Ottawa) Annual report for 1889.

IOWA.—(Ames) Bulletin No. 9, May, 1890. 1. Comparative value of fodder plants. 2. Iowa station milk test—a correction. 3. The "relative value plan" at creameries. 4. The plum curculio and the plum gouger.

MASSACHUSETTS.—(State Station, Amherst) May, 1890. Analysis of fertilizers.

OHIO.—(Columbus) Vol. 3, No. 3, March, 1890. Experiments with corn and oats. Actinomycosis, or "big jaw," of cattle. Vol. 3, No. 4, April, 1890. Spraying to prevent insect injury. Bark-lice of the apple and pear. The Buffalo tree-hopper. Insects affecting corn. The os warble-fly, or bot-fly. Fungus diseases of plants and remedies. Directions for collecting, preserving and studying plants.

VIRGINIA.—(Blacksburg) Bulletin No. 5, March, 1890. 1. Composition of feeding-stuffs. 2. Analyses of some feeding-stuffs. Bulletin No. 6, March, 1890. Variety tests with potatoes.

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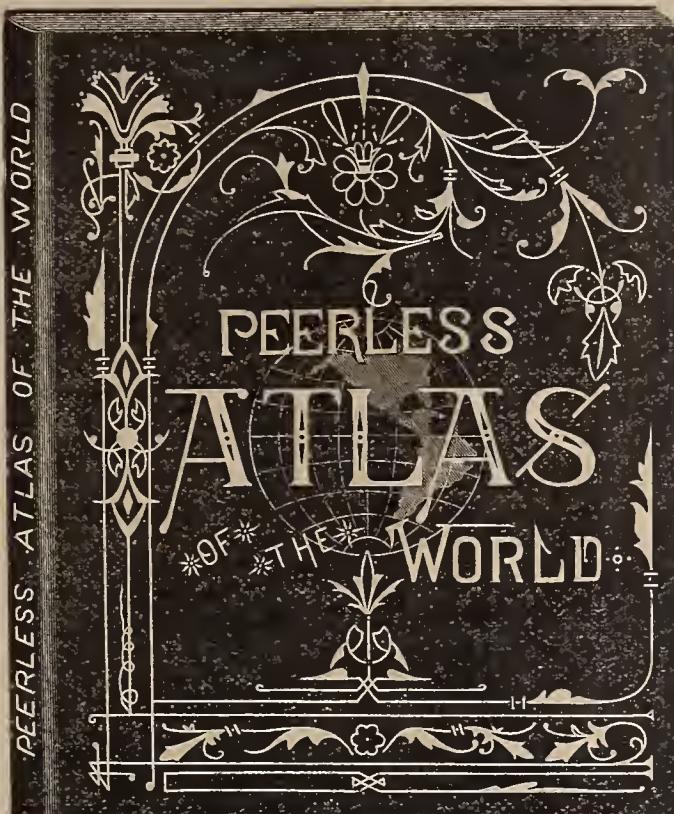
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" Dairy...	10 @ 11	9 @ 12	12
Common...	3 @ 5	6 @ 10	
GRAIN.—			
Wheat No. 2 spr'g	86	.....	.....
" No. 2 w'nt'r	86	95 <sup>1</sup> / <sub>2</sub>	.....
Corn, " .....	31 @ 34	42	47
Oats, " .....	26 @ 29 <sup>3</sup> / <sub>4</sub>	35	38
LIVE STOCK.—			
Cattle, Extra...	4 95@ 5 35	5 10	.....
" Shippers...	3 20@ 4 80	24 00@ 5 00	3 00@ 3 25
" Stockers...	2 40@ 4 00	.....	.....
Hogs...	3 75@ 4 00	4 50@ 5 75	3 25@ 4 50
Sheep, com. to good	3 40@ 5 40	.....	2 50@ 3 75
" Lambs...	1 75@ 7 00	6 80@ 8 00	.....
PROVISIONS.—			
Lard...	5 82 <sup>1</sup> / <sub>2</sub>	6 20	5 50
Mess Pork...	12 80	13 50	13 00
SEEDS.—			
Flax, No. 1...	1 30	.....	.....
Timothy...	1 40	.....	.....
Clover...	3 00@ 3 45	.....	.....
WOOL.—			
Fine, Ohio & Pa...	.....	.....	.....
" Western...	.....	.....	.....
" Unwashed...	16 @ 21	.....	.....
Medium, Ohio & Pa			
" Western...	30 @ 33	.....	.....
" Unwashed...	23 @ 24	.....	.....
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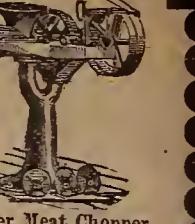
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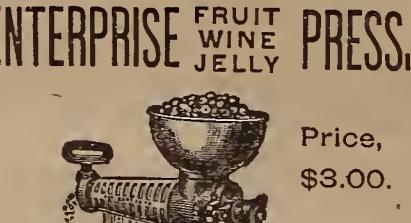
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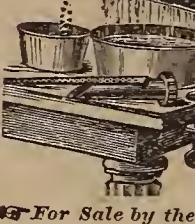


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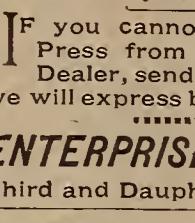
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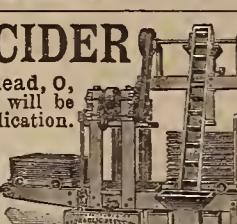
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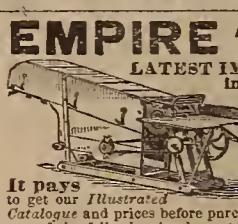
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# FARM & FIRESIDE

EASTERN EDITION.

VOL. XIII. NO. 20.

PHILADELPHIA, PA., and SPRINGFIELD, OHIO, JULY 15, 1890.

TERMS 30 CENTS A YEAR.  
24 NUMBERS.

The Circulation of FARM AND FIRESIDE  
this issue is

**250,700 COPIES.**

The Average Circulation for the 12 issues from  
January 1, 1890, to June 15, 1890, has been

**250,725 COPIES EACH ISSUE.**

To accommodate advertisers, two editions  
are printed. The Eastern edition being  
100,300 copies, the Western edition  
being 150,400 copies this issue.

Farm and Fireside has the Largest Circulation  
of any Agricultural Journal in the World.

## Current Comment.

THE Hon. Benjamin F. Butler may be "away off" in the figures about farm mortgages he gave not long ago, but the advice contained in the following is worthy of careful consideration:

All the improved real estate in Boston, as a rule, has paid its interest and taxes and quadrupled in value during the past fifty years, while during the same period 90 per cent of all the merchants and traders in that city have failed, and 90 per cent of all the business corporations have either done likewise or gone out of business, so that their stock has been wiped out.

In view of these facts, I think it may be unhesitatingly asserted that nothing else is so safe an investment for small savings as improved real estate. Nothing is likely to grow in value faster.

You had, therefore, better buy a piece of improved real estate, however small, that is paying rent. Pay in cash what little money you have, and give your notes, secured by mortgage on the property, for the balance, in small sums falling due at short intervals, and then use all your extra income from the rent of your property in paying them off. You never incur any risk in discounting your own notes, and when your friends find that you are placing your money where it is perfectly secure they will be glad to assist you if those notes should come due a little too rapidly. Thus, in a short time, and almost before you know it, you will have a considerable and perfectly safe investment.

If you had a rich father who would furnish the cash to start you in business, you would probably do better in the long run if you invested it in the way I have pointed out rather than risk it in trade, meanwhile earning your living by working for a salary.

For a young man just starting in life, whose ambition it is to become rich, I would say, never do a mean thing for money.

THE Fortnightly Review says: "Opposite fiscal policies have long been pursued in the two chief Australian colonies of Victoria and New South Wales, which are inhabited by the same race, and whose territory is contiguous. The former has adhered steadily for the last twelve years to a rigorous protective policy, while the latter has adopted for a very much longer period the policy of free trade.

"Protection and free trade have now been tested side by side as an economic experiment for many years. With her enormous area, well nigh four times as large as that of Victoria; with her vast mineral wealth in gold, silver, coal, iron, copper, antimony; her corn fields and immense tracts of pastoral lands and timber; with a finer climate, a larger seaboard, and the grandest harbor in the world, the natural resources of New South Wales are almost immeasurably greater than those of Victoria. And yet, strange to say, the little protectionist colony is ahead of the giant free trade colony in nearly every respect, a striking confirmation of the evident

merce in favor of protection. At the present time, England stands alone a free trader in a ring of empires and republics protected by stringent tariffs; but her Australian colonies are now compelled to fall in with the fashion by fencing themselves round with fiscal defences. South Australia, which had previously suffered from great depression of trade and financial embarrassment, has recently followed the example of Victoria, her sister colony, and since her adoption of a protectionist policy there has been such a marked revival of business and increased prosperity that she has now a surplus of £30,000.

"To sum up, the protective colony is ahead in agriculture, ahead in viticulture, ahead in growth of population, ahead in railway development, ahead in banking, ahead in large manufactories and in the number of workmen employed, ahead in enterprise and capital, ahead in general prosperity and progress, and finally, although behind in mineral and pastoral wealth, its artisans and peasantry—in a word, its entire proletariat—the bone and sinew of a country, are perhaps the most contented and prosperous in the world."

THE senate has passed the Morrill agricultural college aid bill, the provisions of which are as follows:

It appropriates annually out of any money in the treasury not otherwise appropriated, arising from the sale of public lands, to be paid to each state and territory for the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanic arts now established, or which may be hereafter established, in accordance with an act of congress approved July 2, 1862, the sum of \$15,000 for the year ending June 30, 1890, and an annual increase of the amount of such appropriation thereafter for ten years by an additional sum of \$1,000 over the preceding year, and the annual amount to be paid thereafter to each state and territory shall be \$25,000; provided, that no money shall be paid out under this act to any state or territory for the support and maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such colleges separately for white and colored students shall be held to be a compliance with the provisions of this act; and also provided, that in any state in which there has been one agricultural college established under the act of 1862, and in which, also, there is, or may be, an educational institution of like character for colored students, aided by the state from its own revenue (however named or styled), there shall be a just and equitable division of the fund to be received under this act made by the legislature.

The bill is now before the house, and representatives are urged to vote for it. Its object is a most worthy one. It is to aid agricultural education. We believe that if the bill becomes a law, it will accomplish much good in a way that has not been considered.

It is distinctly stated in the bill that the endowment shall not be applied to any other purpose or object than for instruction in agricultural and the mechanic arts and facilities for such instruction. Some of the colleges established under act of congress, approved July 2, 1862, for the benefit of agriculture and the mechanic arts, abandoned the original purpose for which they were founded, and have grown into literary institutions. Such will not be entitled to receive one single dollar of the proposed endowment. Before they can receive it, they must change.

Should this bill become a law, we believe that it will eventually cause a thorough reorganization of these colleges and bring them back to their original purpose.

Worthy as its objects are, we do not favor the passage of this bill unless its provisions are faithfully carried out, and not a single dollar given to a college that is agricultural and mechanical in name only.

A FRIEND kindly sends us a copy of the New York *World* containing one of a series of articles on "War on the Farmers," in which that paper attempts to show that the American manufacturers are plundering the farmers by selling farm implements cheaper abroad than at home, and asks if the *World* is trying to humbug the farmers.

We think that it is—just like many other political papers.

If our friend will send for the Chicago *Farm Implement News*, referred to and quoted in that article, he will get more on the other side of the controversy than the *World* quotes.

Some of the manufacturers mentioned in these articles have publicly and most emphatically denied that they sell their farm instruments cheaper abroad than at home, and state that they are prepared to substantiate what they say, and will offer every facility for a thorough investigation.

Let our friend write to or visit the manufacturers, and hear what they have to say in answer to the reckless charges of political organs. They are entitled to a hearing.

Take one example from the list of implements given. It is stated that the No. 40 Oliver plow is sold to English farmers for less than to the American. The manufacturers publicly, over their own signature, give an unqualified denial of the statement, and defy their accusers to produce truthful evidence to sustain their charges. In speaking of prices, they say:

Our No. 40 is our standard plow, both at home and abroad. In the United States, it retails, with wheel and joiuter, for \$14—never any more. The same plow, fitted exactly the same, sells at retail in England and Scotland for from \$16 to \$18, so that the American farmer buys his plow at a considerable saving. In Mexico, South America, Australia, and elsewhere, the difference is even greater, and we assert, unqualifiedly, that in all cases our plows are sold at a less rate in the United States to the user than they are to any foreign country. Nor do we sell to the foreign dealer at a less price than to the American dealer, all reports to the contrary notwithstanding.

EDWARD ATKINSON, the political economist, is of the opinion that the effect of free coinage of silver would be a decrease of prices instead of an increase, as claimed by its advocates.

His opinion is based on the fact that the great volume of the business of the country is transacted by means of instruments of credit in the form of bank and individual notes, bills of exchange, etc., which, by taking the place of and diminishing the amount of money required, become the paramount factor in determining prices. Since these instruments of credit are based upon actual money, the quantity of credit depends much more upon the quality of money than the quantity.

Hence, any free coinage act, or other act of congress that will lower the quality of our money, will greatly reduce the volume of credit and affect prices unfavorably, because no good business man will grant a credit that is to be liquidated in coin of less value than at the time it is granted.

If the money of a country is inflated in such a way that its quality is lowered, the quantity of credit will be decreased to such an extent that there will be a contraction of the combined volume of money and credit, and the result will be a bad collapse after a temporary inflation of prices.

What the people want is the free coinage of both gold and silver on exactly the same terms. Then the silver dollar and the gold dollar will be of equal value, and our credit will be at the highest possible standard the world over. Of course, the great difficulty with the double standard is to maintain the equilibrium between the two metals.

There is a cry for cheap money, but the best money is the cheapest in the end. With the best money, the volume of credit may be more than a hundred times the amount of money on which it is based. The moment the quality of that money is impaired by legislation, the quantity of credit shrinks and business is deranged.

THE flaxseed inspection department of the Chicago Board of Trade has issued a circular, telling why flax should be stacked or housed at the proper time. The growers annually lose thousands of dollars by the depreciation in the value of their flaxseed by leaving it exposed in the field to the weather until threshed, and then rushing it off to market. About one half the crop, much of it being unfit for storage, is sold within sixty days, and the result is a regular annual break in the flaxseed market.

When left in the field for any length of time after harvest, flaxseed is greatly damaged. Being so soluble in water, it is easily damaged by the rain. Exposed to the sun, both seed and straw become brittle, and break up when threshed, and mix with the good seed, and it is then graded low on account of impurities. Again, seed threshed from the field, however dry, will heat in the bin, and is unsafe for storage. When stacked at the proper time, it passes through a sweat, which greatly improves the condition of the seed and makes it fit for storage. There are other good reasons why flax should be stacked and cured before it is threshed and sent to market, but the fact that the grower can put more money in his pocket by so doing should be sufficient to induce him to take better care of his flax crop.

THE asking of the numerous questions necessary for the collection of farm statistics by the census enumerator doubtless caused many farmers to realize how little they know about their own business. The system of memory book-keeping, which so many of them depend upon entirely, would be disastrous to any other business. It is really remarkable that some of them get along as well as they do. Much good has been done if they have been aroused by the enumerator's questions about their crops, etc., to the importance of keeping some kind of books that will be a plain record of the expenses, products, receipts, profits or losses, etc., of their farm work.

## FARM AND FIRESIDE.

ISSUED 1st AND 15th OF EACH MONTH BY  
MAST, CROWELL & KIRKPATRICK.THIS PAPER HAS BEEN ENTERED AT THE POST-OFFICE  
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We have an office at 927 Chestnut Street, Philadelphia, Pa., also at Springfield, Ohio. Send your letters to the office nearest to you and address

FARM AND FIRESIDE,  
Philadelphia, Pa., or Springfield, Ohio.

## The Advertisers in this Paper.

We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements, as advertisers often have different things advertised in several papers.

## Our Farm.

## SUGGESTIONS FROM THE STATION BULLETINS.

BY JOSEPH.

INSECT LORE.—In Bulletin 14 of the agricultural experiment station of Nebraska, volume 3, Entomologist Lawrence Bruner devotes about one hundred and forty pages of printed matter, thoroughly illustrated, to the subject of insects injurious to young trees on tree claims. Any one of my readers, if interested in this subject, can try to get a copy by addressing Lewis E. Hicks, director of the experiment station, Lincoln, Nebraska. This treatise pictures and describes not only the injurious insects, but also their parasites and other friendly insects. Among the latter we find one mentioned which heretofore has been (and is yet by most people) classed among injurious insects; namely, the snowy tree cricket. This, it is true, sometimes does a little injury to raspberry and blackberry canes, by the method in which it deposits its eggs. If not too troublesome in this respect, we should have a little patience with this insect, as it feeds very largely upon plant lice of different kinds and other soft-bodied insects. So confirmed, indeed, is this cannibalistic habit with them, that the benefit resulting from their presence undoubtedly far exceeds the injury they do us.

In a general way, I might say there is no need of letting leaf-eating insects destroy our trees and shrubs, whether in the orchard or on the lawn, street and avenue, as long as we can put a stop to their mischief by spraying with arsenical solutions. Paris green in water, at the rate of one pound to 300, 400 or 500 gallons, applied to the endangered tree in a generous spray, will be very apt to make short work of the caterpillars and slugs.

Another safe remedy, also applied in the form of a spray, is the kerosene emulsion, repeatedly mentioned in these columns. The following formula is given in the bulletin as used by the members of the division of entomology in the United States department of agriculture, and known as "Hubbard's formula."

Kerosene (the common lamp oil) ..... 2 gallons.  
Water ..... 1 gallon.  
Common washing soap .....  $\frac{1}{2}$  pound.

Heat the solution of soap, and add it boiling hot to the kerosene. Churn or agitate the mixture by means of a force pump and spray nozzle for five or ten minutes. The emulsion, if perfect, forms a cream which thickens on cooling, and should adhere without oiliness to the surface of glass. Dilute before using, one part of the emulsion with nine parts of cold water. The above formula gives

three gallons of emulsion, and makes, when diluted, thirty gallons of wash.

COMMERCIAL MANURES.—A special bulletin for May, issued by the Massachusetts Agricultural College experiment station, contains an article on the most profitable use of commercial manures, written by Prof. Paul Wagner, director of the agricultural experiment station in Darmstadt, Germany, and translated by Prof. Charles Wellington. This is full of good points, and farmers in any part of the country, who wish to possess the bulletin, can undoubtedly get a copy by addressing a request for one, to the Hatch Experiment Station, Amherst, Mass.

Attention is called to the fact that the cause for small returns is not always a lack of plant food. Often the plant suffers from thirst, from insufficient porosity of the soil, whereby the root development is checked; from caking of the soil, which works harmfully; from impenetrability of the soil, by which stagnant water, with all its attendant evils, is entailed; from deficiency of lime, of humus, etc. In short, there are very many physical and chemical relations of soil, or unfavorable conditions of weather, which prevent a healthy development of the plant, and which diminishes the crop. Of course, in such places where the plant does not hunger, the mere supply of food will not do.

Hence the establishment of better conditions must be made by irrigation or drainage, deep culture, better plowing, harrowing, mowing, marling, mucking, etc. All this shows that deep, well-tilled humus loam, under good atmospheric conditions, offers the best pledge for a sure effect from commercial manures, and every means which improves the quality of soil advances the success of the same. The question now arises what to do when

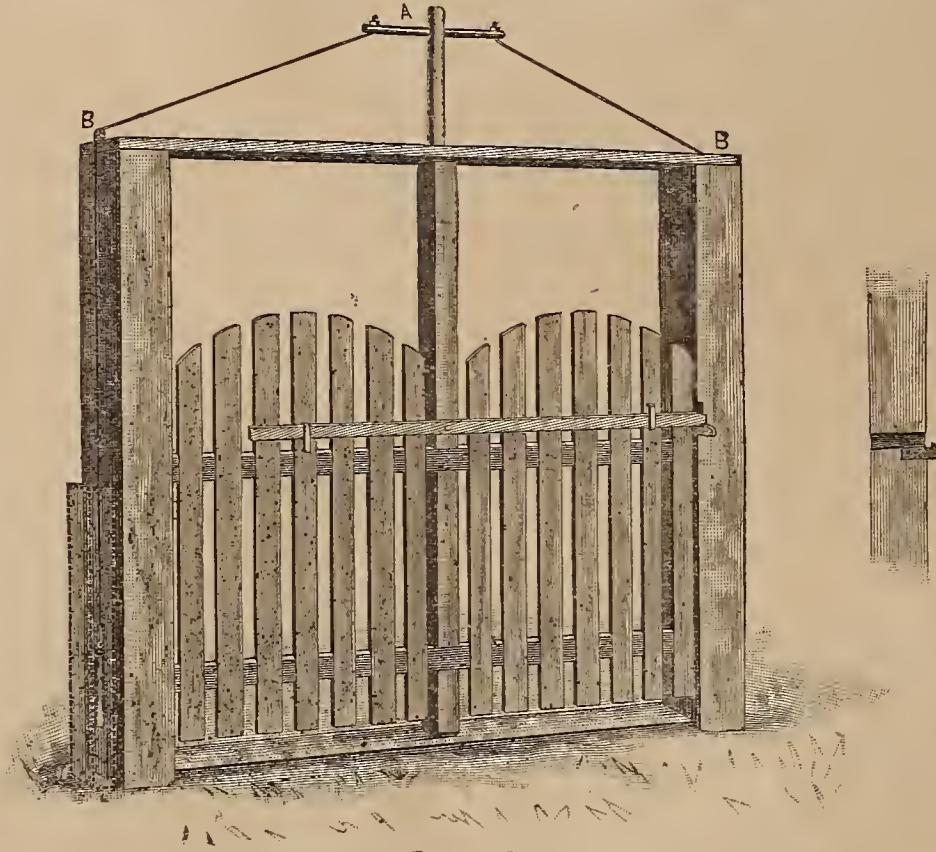
tious farmer in a position to increase, temporarily or permanently, the development of crops on every soil, even on the poorer, and to so adjust the nutrition of the same to the peculiar relations of soil, climate and weather, as to secure full advantage from the favorable conditions, diminishing, and as far as possible, removing the unfavorable.

"3. Commercial fertilizers enable the farmer who cultivates extensively to make the most of his wide acres for the storing of atmospheric nitrogen. Phosphate and potash salts give to lupine, clover, vetches, peas, srradella, etc., the power to withdraw from the atmosphere great quantities of nitrogen, thus enriching husbandry with the most valuable of all fertilizers. They also enable them to increase the food capital, and to gradually transform the extensive production into an intensive one, thereby increasing both the value of the land and the revenue."

One of the great practical lessons which this bulletin suggests is this: That we should, if possible, alternate our manures as well as our crops, using barn-yard and commercial manures either in alternation or, in case of run-down soils, at the same time. Either one of the two manures, applied alone, will give us little effect on such soil at first. By combining the two, and applying in generous doses in the same season, we secure both immediate and permanent results.

The bulletin also calls attention to the waste involved by feeding crops complete fertilizers, when only one or two of the food elements are deficient in the soil, or by applying excessive quantities of any one of these food elements beyond the possible need of the crop. The following is a summary of conclusions:

"1. Artificial manures (phosphoric acid,



A DOUBLE GATE.

we have to deal with an exhausted soil. As is generally known, an application of barn-yard manure on such soil has very little effect at first. Only after a series of years, and after repeated and heavy applications of manure, can the former fruitfulness of the soil be recovered. But with the aid of artificial manures, we are in a position to bring this soil to high productive power at once, and to retain it there until the barn-yard manure yields generous results, and has brought back a richness lost by previous irrational, exhaustive management. A summary of these truths is given as follows:

"1. Commercial manures place the farmer who cultivates intensively in a position to bring his crops, even of those varieties which need most plant food, or are most productive, to their highest development, increasing the yield to a degree that is not possible by mere barn-yard manuring; and furthermore, they place him in a position to return very exhaustive crops to their former fields, after relatively short intervals, and that without perceptible diminution of yield or exhaustion of soil.

"2. Commercial manures place the car-

potash and nitrogenous fertilizers) can effect an increase of yield when all other factors are either temporarily or permanently favorable.

"2. Phosphoric acid and potash are to be stored in the soil until a surplus is present; that is, until an excess beyond the demands of the most exhaustive crops is supplied.

"3. The nitrogen increasers (lupines, peas, clover, vetches, lucerne, etc.) need, under normal circumstances of cultivation, no fertilizing with nitrogen salts. Only on exceptionally poor soils can it be profitable to apply these, and in such cases the application should be small, and made during the first period of growth. This is for the purpose of bringing the plants, quickly and without disturbance, to that stage of development beyond which soil nitrogen is not needed, as the entire amount can be drawn from the air.

"4. The nitrogen consumers (straw, hood and oil crops, flax, hemp, tobacco, etc.) require nitrogen manuring; but the nitrogen must not be applied in surplus, only in quantities which careful computation indicates necessary for a required increased yield of the crop in question."

## GATE.

Mr. S. Warfield, Arkansas, sends a sketch of a double gate which opens either way. It is rendered self-closing by means of weights fastened to cords or clothes-line wire suspended from A. By fastening boards to the posts, as shown by the dotted lines, the weights are made invisible. Rollers are inserted at B B. Make a latch to extend nearly across the gate, but latching only on one post, that it may be unlatched from either side, going or coming.

## OYSTER FARMING IN MARYLAND.

COMPILED FROM REPORT OF MARYLAND OYSTER COMMISSION.

The oyster industry is one of the most important in Maryland, and is very much greater than in any other state. The principal oyster beds are located along Chesapeake bay and in the wide, shallow rivers and sounds emptying into the bay. From a small business it has grown to large proportions, and employs thousands of tongers and dredgers; the state employs a police force to guard the interests of the state and individuals. These police patrol the waters from the Potomac to the Susquehanna, and prevent infractions of the law.

The sources of the oyster supply are three: 1. From natural beds. 2. From oyster planting industry. 3. From oyster farming.

The oyster commissioners, in their report, state that the supply can, by the industry and intelligence of man, be profitably increased almost indefinitely. The oyster beds of Maryland are, as yet, almost absolutely undeveloped. The wealth which is within reach of the people of the state and their descendants, from the oyster grounds, is great, almost beyond expression, and it is not too much to affirm that the money value of the grounds under water is equal to that of the dry land.

The area of oyster beds, approximately ascertained, is 578,224,000 square yards, or 193 square miles, or 123,520 acres. Only a very small part of the bottom which is proper for oyster farming is now occupied by natural beds, and it is safe to estimate the total area of valuable oyster grounds in Maryland at 1,000,000 square miles, or 640,000 acres. Much of this ground could be made to yield to its cultivators an annual profit of one thousand dollars per acre, and the profit on the whole, under a thorough system of cultivation, would not be less than one hundred dollars per acre.

It is safe to state, that when the whole of this area shall have been developed, the future citizens of Maryland will be able to draw an annual income of over sixty million dollars from its waters.

At present, however, their value is very much below this estimation. The oyster crop has never been very much more than ten million bushels, and its value to the fishermen has probably not exceeded two million dollars, and the actual annual value of the oyster beds is thus seen to be less than three per cent of their possible value.

If the grounds were no more profitable than those of Rhode Island, which, by the adoption of wise measures, have become very profitable of late years, the 640,000 acres would annually yield to their cultivators nearly five hundred and fifty million dollars. The beds are in reality far more valuable than those of Rhode Island, as the waters of the Chesapeake are free from the destructive enemies which there so often destroy a bed in a few days, and the milder climate protects the oysters from destruction by ice and frost.

The third, and by far the most important source of the oyster supply—oyster farming—is practically unknown in Maryland. Oyster farming is the rearing of oysters from the egg, and it is therefore true farming, and as each female oyster is able to produce millions of young each year, the profits of the industry are almost unlimited. The method most successful is depositing clean oyster shells upon the bottom just before the spawning season, for the attachment of the young, and then placing among those shells a few mature oysters to furnish eggs and young. As

soon as the young oysters, which are caught in this manner, grow large enough to handle, they are distributed over the bottom, and are then watched and tended in such a manner as the peculiarities of each farm render necessary. Twenty bushels of shells laid down on oyster grounds will produce one hundred bushels of oysters.

In very favorable situations, oysters grow rapidly, so that the common oyster is ready for the table in a year and a half or two years, but in other places a longer time is required, often from three to four years.

Besides the shores, rivers and inlets, ponds and enclosed areas of water may be readily utilized. Thousands of acres of salt marshes could be readily converted into permanent and profitable planting grounds for the cultivation of oysters. The state of Maryland grants to residents the perpetual right to cultivate oysters upon five acres of ground, which have been surveyed and mapped, and the privilege sold at auction for a small sum per acre, the ground to be plainly marked by stakes, bushes, buoys, ranges or monuments. Owners of land bordering on the waters of the state own the right to cultivate oysters on their shores.

There is no fear the market will ever be overstocked with a cheap and nutritious article of food like the oyster, and as improvements in transporting and packing are introduced, the demand to supply the rapidly increasing population of the United States will fully tax all the resources of the waters of the state, to say nothing of the demand from Europe.

If the natural advantages were availed of, five hundred thousand people could be employed the whole year in this industry in Maryland. There can be no question that large bodies of land now for sale at low prices, in the counties bordering on the Potomac and the Chesapeake, can be made very profitable in connection with the cultivation of oysters on the shores, and that a more sure and ample return for invested capital and labor awaits the oyster farmer than can be had from any other farming industry. The industry is profitable almost beyond conception, and we are told on official authority, that a crop of oysters valued at eight million dollars was raised in this way upon a French farm of four hundred and ninety-two acres, while upon another French farm of five hundred acres, sixteen million oysters were taken in six tides, although there were no oysters to be found there when the farm was established five years before.

The industry has been carried on for more than fifty years in the East river near New York and Brooklyn, and although no oyster beds in the country have been more heavily drawn upon than those, which are close to the great centers of trade and population, they have been preserved to the present time and are in no danger of extermination.

The state of Connecticut, some years ago, adopted laws which have led to large and valuable farms. Fifty thousand acres of entirely barren ground, covered thirty to fifty feet deep by the waters of Long Island sound, have been made into productive oyster beds, and have multiplied by a hundred fold the production of native oysters.

GEO. I. JONES.

**CONTINUED EFFECT OF PHOSPHORIC ACID.**  
In a previous article we gave results of experiments with several forms of phosphoric acid in the year 1888. For the purpose of determining the continued effects, the plats of 1888 were again planted to corn in 1889, having, as at first, received an application at the rate of 100 pounds of sulphate of ammonia and 160 pounds of muriate of potash to the acre, or a quantity sufficient for the requirements of an average crop of nitrogen and potash. Perhaps it ought to be stated in this connection that the two seasons were widely tried so far as climatic conditions are concerned. In 1888, during the ordinary period of growth of the crop, it was not at all dry, continuing until nearly harvest time; while, on the contrary, during 1889, the season was one of unusual wet and rain, keeping the soil fully saturated with water. Of course, it is difficult to estimate any effects that these different conditions

might have upon the results. In order to notice more clearly the results by way of comparison, we reproduce the table of products for the year 1888, by plats, as has been given heretofore:

Plat.	Form of Phosphate.	Yield grain in lbs
A	Dissolved bone black	243.9
B	Grand Caymans	134.2
C	Nothing	43.7
D	Thomas slag	90.8
E	South Carolina rock	82.2
F	Nothing	43.4
G	Bolivian guano	83.6
H	Dissolved bone black (double quant.)	236.7

The same plats, planted the second year, with only the original application of phosphoric acid, gave the following results:

Plat.	Form of Phosphate.	Yield grain in lbs
A	Dissolved bone black	36.3
B	Grand Caymans	48.3
C	Nothing	12.3
D	Thomas slag	61.0
E	South Carolina rock	52.3
F	Nothing	14.8
G	Bolivian guano	93.4
H	Dissolved bone black (double quant.)	91.8

These tables form an interesting study. While it appeared in 1888 that only about such a quantity of the phosphoric acid as contained in dissolved bone black as was furnished by an application at the rate of 256 pounds per acre was required for the growth of the corn, a greater portion of which was appropriated, as appeared by the result of 1889, where the double quantity was applied, the effects were still felt to a considerable degree, although not as much as might have been expected. It also appears that the effects varied with the different forms, while with Grand Caymans, South Carolina rock and Thomas slag the benefits are most marked during the first season of use. With Bolivian guano the case is different, as here we get better results the second season by nearly 12 per cent. Precisely what conditions are best adapted to secure most satisfactory results by the use of fertilizers, is a question for considerable study and investigation.

W. H. YEAMANS.

Connecticut.

#### SHEPHERDS AND SUCCESSFUL SHEEP RAISING.

Successful sheep raising now and forty years ago, in the agricultural states of the Mississippi valley, is a very different thing. Why it has been profitable in the

tem which we have been driven to in sheep culture. When the time comes, and come it will, when mutton prices are lower, there will be pressing need of closer attention to handling and breeding these double-purpose sheep. It will be more a question of management than of breeds, and the important feature of such sheep husbandry will be management and feeds.

The American shepherd is rarely spoken of where the most careful, intelligent, painstaking management is meant. The Mexican shepherd is appreciated for the ranch system of sheep raising. The English, Scotch and German shepherds are in special demand and favor where the best agricultural mutton husbandry exists and succeeds. We imagine them as they are, born shepherds. Their fathers were descended from shepherd sires. The traits of character inestimable in a shepherd are by physiological law transmitted from father to son and intensified in the generations. It may not be so important that lines of shepherds are especially raised up; but the dashing, impulsive, irregular American character is not apt to be the best shepherd when the highest culture of sheep and its products are sought for. A mere love for sheep, while the first, is not the only essential in the make-up of a shepherd. If there is, however, a genuine love for sheep, there will be found the disposition to gain the intelligence, skill and persistence provided the industry is innate. No man or boy "born tired" ever was or ever can be a good shepherd. A successful shepherd must not only see everything and know it, but must know what he wants to see before he produces it. The shepherd must do more than protect the sheep from danger. He is to tend, feed and manage for their best welfare and highest development in every direction. Nothing can be omitted, delayed or partially done, whether on the ranch or the farm, whether the purpose is wool, mutton, lambs or breeding flocks.

The fact that such special attention is expensive need not be taken account of—it is the indispensable to success; it is where agricultural mutton sheep husbandry prospers or fails; it is the weak place in our American systems of sheep raising; it is what we have to more carefully study and practice.

Shall it be done? Of course; it means prosperity and permanence; it meets the spirit and purposes now more than ever fixed in the American sheep raiser's mind. If it is, the future will become harmonious, permanent and prosperous; if it is not done, the experiences of the past will be repeated. R. M. BELL.

Illinois.

#### SPLICING WIRE.

A subscriber sends his method of splicing wire, which is fully explained by the accompanying cut.

#### ARSENICAL POISONS—THEIR DANGERS AND ANTIDOTES.

BY JOSEPH (TUSCO GREINER).

The terrible poisons, Paris green, London purple and arsenious acid—one or all—have become necessary requisites of the farm and garden. Familiarity with danger has bred contempt and recklessness to such a degree that the press cannot too often urge rural people to greater care and caution. Packages of Paris green, etc., partly used and open, are frequently left lying about in barns and other out-buildings, and the wonder is that cases of accidental poisoning do not occur much oftener than they do. Still, they happen often enough. Wherever strong poisons are used for any purpose, there is a chance of accidental poisoning, and farmers should never forget or belittle the dangers connected with the use, or even with the mere presence on the place, of such deadly poisons.

Every person who uses arsenical compounds should not only acquaint himself with the proper methods of treating cases of poisoning, but also keep the antidotes within easy reach. Dr. Wyatt, in *American Analyst*, recommends the following course of treatment for cases of poisoning by any of the compounds of arsenic:

"A teaspoonful of mustard flour in warm water. A teaspoonful of dialysed

iron mixed with the same quantity of calcined magnesia every five minutes for one hour. Then plenty of oil, or milk, or some mucilaginous tea—say linseed."

Where a drug store is near by, the course to adopt in accidental poisoning is simple. First, induce vomiting by any means most convenient, say tickling the throat with finger or feather, or by mustard flour in warm water, as advised by Dr. Wyatt, or by giving sulphate of copper or sulphate of zinc. The desired result might also be obtained by using a stomach pump. In the meantime, dispatch somebody to the druggist whose duty it is to be prepared to make the proper antidote for arsenic, moist peroxide of iron (hydrated peroxide or sesquioxide of iron), on short notice. This remedy cannot be kept on hand, as it would soon lose its strength and effectiveness, but must be prepared fresh. Then give according to directions. The remedy is harmless, and should be given in large doses.

People making use of Paris green, etc., who live many miles from a drug store, however, should keep the materials for making the antidote on hand. According to the *Dispensatory of the United States of America*, the following can be recommended:

"Mix 1,000 grains of the solution of sulphate of iron with twice its weight of water, and keep the mixture in a well-stopped bottle; rub 150 grains of magnesia with water to a smooth and thin mixture, put this in a bottle capable of holding thirty-two fluid ounces (about one quart) and fill it up with water. When the preparation is wanted for use, mix the two liquids by adding the magnesia mixture gradually to the iron solution, and shake them together until a homogenous mass results."

Farmers remote from villages or cities will do no more than use ordinary precaution, if they have the two mixtures put up by their apothecary, and keep them on hand ready for use in an emergency. The mixture of the two, prepared as directed above, is a safe antidote for Paris green, London purple, or white arsenic (arsenious acid), the three compounds of arsenic most apt to be found in the hands of farmers and gardeners.

#### SPARE THE STRIPED GOPHERS.

G. P. GILLETTE.

[Entomologist Iowa Agricultural Experiment Station.]

I notice in your issue of May 1st, that a Mr. L. J. Beach reports success in the use of carbon bi-sulphide for the destruction of gophers. I have no doubt but that this is the cheapest and best method of destroying burrowing animals, such as the gray and striped squirrels, wood-chucks, and perhaps the pocket gopher as well, and probably many of the readers of *FARM AND FIRESIDE* will be led to adopt this method of destroying these animals after reading the article above referred to. I wish, therefore, before this work of destruction is begun, to advise the readers of your valuable paper to *spare the striped gophers*, which are more beneficial than injurious to the farmer. This may seem absurd to those that are not acquainted with the food habits of these little rodents, farther than to know that they pull young corn, but a careful study of their food habits at this place last summer, fully warrants the statement. Squirrels were shot at intervals from April 19th till fall, and the contents of their stomachs carefully examined. It was found that, from first to last, about 50 per cent of the contents of their stomachs consisted of injurious insects, chief among which were cut-worms, web-worms, wire-worms and grasshoppers. As high as 50 cut-worms and web-worms were found in a single stomach. From the stomachs examined it was estimated that, on an average, a squirrel would eat at least 2,500 of these cut-worms and web-worms from the first of April to August, aside from other noxious insects. The striped squirrels, or gophers, should be especially protected on meadow and pasture land, and if some way can be found to prevent their taking corn, they would be found very useful in a corn field in destroying the cut-worms. I have very often noticed that the squirrels do not dig deep enough about the hills of corn to reach the kernels, in which cases it is probable that cut-worms or the web-worms were the coveted morsels, and not the corn.

I believe if the seed is planted to a good depth, and a few bushels of corn are thrown on the surface, where the squirrels are most numerous, and the ground is harrowed after planting, so as to cover up the tracks of the marker, very little damage will be done by the striped squirrels in corn fields, and they will do much that is good the summer through in aiding to keep some of our most injurious insects in check.

What I have said in regard to the striped squirrel does not apply to the gray squirrel or gopher. One of these animals will do more harm than half a dozen striped squirrels in a corn field, and I have not yet been able to find that they eat insects at all.

#### WIRE SPLICING.

past as a whole need not be argued now. Just why there has been depressions in sheep raising, and in every case has been followed by prosperity, is no mystery at all. The dreadfully humbled state of the American wool growing industry, for the last four years, has called loudly for relief from congressional legislation, which was just and has been granted. This has been a greater relief to wool growers of the United States than is generally estimated. But the lesson learned during this period of low prices of wool has been the most reliable and valuable that the sheep raisers of this country have ever been taught. It is a fact outside of the theories and experiences of the past in the history of American sheep husbandry. Were it not for their timely relief, the sheep industry of the United States would have been again "snowed under." It was the star of hope in one of the darkest hours to wool growers. It was forced upon wool growers, and tried their faith and genius to meet and overcome the situation. The great majority of sheep raisers lived for a remedy outside of themselves. The few looked to a practical remedy within their own control. This is supposed to be the cause of the special prosperity that has existed during the low prices of wool. Certain it is, two such extremes have never before existed at the same time in our sheep industry. It was like turning defeat into victory. It was a signal relief from low prices of wool at an emergency. It was, in short, a "godsend" when most needed.

The needs are now, better methods and better shepherds, especially in the regions of the United States where diversified sheep husbandry is possible. All our ideas of sheep raising are in the direction of fine wool production. What we know applies to Merino husbandry, and cannot be eminently successful in the newer sys-

## Our Farm.

## FARM AND GARDEN NOTES.

BY JOSEPH.

THE BUSH LIMAS.—I am having first-rate luck with Henderson's Bush Lima bean. The seed, gathered last fall by myself, came up well, and the plants grow nicely. I am in hopes of being able to gather a bushel or two of seed of this variety this year, and, if successful, intend planting it very largely next season. The variety is immensely prolific, and will continue to be popular for at least some years. The Kumerle Lima, a few seeds of which I managed to obtain, has come up to the extent of four plants. My aim, of course, is to get the largest quantity of seed from them for future planting. This is also my chief object with the two good plants and one poor one, which have succeeded in getting out of three packages of Burpee's Bush Lima bean, containing in all one dozen seeds. Thus, each plant of this latter variety costs me little less than one dollar; and yet, I feel quite certain of the wisdom of the investment. If this bush Lima turns out to be what it now promises, there can be no doubt that seed of it will be in greater demand than the supply for years to come, and that every one fortunate enough to have seed to plant can make it pay largely to raise it for sale. This will, in all probability, also be the case with the Kumerle Lima bean; for this and Burpee's bean must, to a great extent, if not entirely, take the place of the pole Limas—always provided, however, that they are perfect bush Limas, and do not develop great faults in unexpected directions. At any rate, I propose to increase my seed stock of all these bush varieties as fast as good treatment and careful seed saving can do it.

My pole Limas, and other running beans, are again trained to wire trellis. The longer I use this method of training them, the better I like it, the whole thing being so simple and inexpensive—a stout wire stretched across a row of posts, five feet high; a small wire underneath, say six or eight inches above the surface of the ground, and some cotton yarn wound zigzag around the two wires for the vines to run up to the upper wire. The plants take readily to this support, without much coaxing or assistance, and the whole, when fully developed, presents a wall of green, plentifully provided with flowers and pods. At the same time, I have a row or two of pole Limas entirely without support, the plants having been cut back with a sickle to dwarf them, and this treatment will be repeated every week or so. The object is to keep them in bush form as much as possible. Prof. Budd, of the Iowa Agricultural College, has used this method of growing pole Lima beans with remarkable success. Continued planting of seed saved from plants thus dwarfed gave him, in the course of a few years, a type of Limas of a low, stout, bushy habit of growth. Unfortunately, the experiment was at last abandoned and the seed lost. But it shows that the evolution of the bush form of Limas from the pole form is, perhaps, not so very difficult, and only a matter of perseverance.

CORN AND BEANS AS FIELD CROPS.—The season has been so wonderfully wet with us that many fields, especially those not well drained, are only now (end of June) being planted to corn and potatoes. Farmers were getting ready a dozen times to start in with the plow, when the land was getting a little dry, but heavy rains soon again transformed arable soil into swamps and water-holes, and made working it impracticable. Now, the season has got to be pretty late for planting corn, and much of it, in some localities, at least, can hardly be expected to come to full maturity. This, in some of the colder sections of the states, is a somewhat uncertain matter, anyway, unless very early varieties are selected. Farmers thus located should, for this reason, have an eye for very early-maturing kinds of corn, and when a good one is once secured, guard it carefully and try to still improve it in this direction by selecting the best, earliest-ripening ears in the whole field for seed. Every farmer should make it a

practice to go through his corn fields at the time the grain begins to glaze, and cut out the stalks with the most desirable ears, shock them up to cure, then break off the ears, braid them in a string and hang them in some suitable, secure place. Thus, we can keep a strain of corn that will be sure to ripen, even if circumstances should make it necessary to plant late in June.

It seems to me, also, that common, white beans are not appreciated enough as a field crop, especially in seasons like this, when the best time for planting corn has to be allowed to pass, with many broad acres yet unplanted. Beans may be planted now with a certainty of ripening the crop, and are always in demand at prices which, I believe, usually pay much better for the labor of tending the crop than do wheat or corn. Beans are not exhaustive to the soil. They can be planted among young orchard trees without injury to the trees, and if the straw is left on or returned to the land, the crop will rather benefit the trees and the soil. Modern machinery makes the labor of gathering the bean crop quite inconsiderable, and, while it will usually be necessary to have the beans hand-picked before putting into the market, this job can be done on winter evenings by members of the family, or by cheap, hired help. Why not grow a few more beans, and a little less wheat?

POTATOES IN ILL-PREPARED SOIL.—I do not usually practice planting in badly-prepared soil. Better defer planting even to a very late period, until the land can be got in proper shape, or not plant at all, than plant in soil that is all hard lumps and chunks of unbroken sod. But sometimes circumstances compel us to do things we really do not like to do. Some of my potato land this year left much to be desired in regard to preparation. Some of the plots, as usual, were planted with single-eye pieces. Most of these have not germinated, and, consequently, the single-eye planting this year shows mostly miss-hits, and the few plants that did come are weak and small. Altogether, the prospect of anything like a crop from these plots is not very flattering. Previous experience has taught me that quite a respectable crop can be grown from single-eye planting, provided, however, that the pieces are large; that is, from large tubers and planted very close, not too deep, and in fine, mellow and rich soil. The average farmer hardly ever has land in best shape for single-eye planting, or for small seeding generally, and, consequently, the latter is not a safe practice for him. When you, at this time, take a look over the potato fields on many farms, you will see the plants come up weakly and scatteringly, and you may make up your mind that the crop will be correspondingly—consisting of small potatoes, and that the cause may be found in too close cutting of the seed. In land indifferently prepared, a whole or half potato planted two, or even three, feet apart in the row will give a better stand, and a better crop than the same amount of seed divided in many small pieces, and planted at equal distance apart, may this be four, five, six or eight inches. But, on the whole, I am not a believer in light seeding.

TREE TOMATOES.—An ingenious seedsman this season has sent out a new "tree tomato." With the seed package came a slip giving the following directions how to grow it; namely, "Plant seed the fore part of March, in the house or hot-bed, set in garden about May 10th, set in rows, east and west, 18 inches apart, near water, give them stakes or trellis, 8 feet high, hoe out a ditch 5 or 6 inches deep, one foot in front of plants, and fill it with water, morning and night, nip off every side shoot as fast as they appear. Keep them well tied up, well trimmed and no end of water." I give this, less as a curiosity (and such it is) than as a method to grow any variety of tomatoes as a "tree." It is not even necessary to go to all this trouble about carting barrels of water. Plant any strong-growing variety in rich soil, trim to single stalk, and train to a pole, and you will surely grow a "tree" tomato. I have seen a patch of 'Trophys' (some years ago, when that sort was the leading market sort) grown by my family physician,

perhaps as much for beauty as for usefulness, and it was a grand sight indeed. What you want chiefly, to insure success, is a rich piece of ground.

## Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

## REMEDY FOR BORERS.

Dr. Otto Lugger, the well known entomologist, recommends a wash made as follows, as a preventive of the attacks of borers: To ten gallons of strong suds, made from hard soap, add one quarter of a pound of Paris green or London purple, and sufficient plaster of Paris to make it of the consistency of whitewash. With this paint the trees where liable to be attacked, after digging out the borers. The wash should be put on at least three inches below the surface of the land. Plaster of Paris is used because it adheres very tenaciously to the tree, while common lime wash would be washed off in a short time. This wash is especially valuable to apply to peach trees.

## INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

**Rome Beauty Apple.**—J. M., Alice, Ohio. I cannot give you the history of the Rome Beauty apple, except to say that it originated in southern Ohio, and that it does well in the south-western states.

**Peach Pits Wanted.**—W. S. P., Waldrup, Tex., writes: "Can you tell me where I can get pits of any of the following peaches: the Roser, Indian Blood, Wager and Ellison?"

**REPLY:**—Write to Elwanger & Barry, of Rochester, N. Y.

**Culture of Aloe Plant.**—R. E. T., Reiley Ohio. The aloe plants, like all tropical plants, require a season of rest as well as of growth. When they start to grow, they should have a moderate amount of moisture and a warm situation; as soon, however, as they stop growing, water should be withheld until the soil is quite dry on top, but the plant should never be allowed to wilt. Most of the aloes are of easy culture.

**Diseased Apple Branches.**—W. M. F., Jacksonville, Ark. The species of branches received. I have looked them over carefully, and so, also, has the well known botanist, Dr. Lugger, but we are not able to make out anything very unusual about them. If the specimens were sent in a fresh state, we could study them much more satisfactorily. They were very dry when they came to hand. Would like fresh specimens and full description of its action on your trees.

**Osage Orange Timber—Trimming Pines.**—C. R., Kidder, Mo. Osage orange timber is fully as durable as white oak grown under the same conditions and of the same size. The bark should be removed from the posts, and it would better to thoroughly season them before putting them into the ground, and the same rule holds good with any kind of post timber.—Pine trees should be cut back in the spring just before growth starts, which is with you any time in April; that is, if they are to be cut severely. Very light pruning may be done in summer.

**Buffalo Berry not Bearing.**—H. B., Albion, Mich. The reason your buffalo berry does not fruit is that the plant is what botanists call dioecious—that is, the staminate or male flowers are borne on one plant, and the pistillate or female flowers are borne on another plant. The same is the case with willows and poplars, and many other trees and shrubs. There must be at least two plants of such kinds near each other, or they will not fruit. It is desirable, when taking up such plants, to put out at least three of them, for in such a case we are pretty sure to have both kinds. It is a very beautiful shrub.

**Peach Curls.**—J. N. S., Hartford, Conn. The leaves you sent are affected with a disease called the curls. It is caused by a fungus growth, but the plant is predisposed to its attacks by reason of some changes in the atmosphere. It is more common when a wet, cold time follows immediately after a warm spell of weather, and just after the trees have leafed out, while the foliage is tender. All such diseased leaves should be picked off and burned, so you will hasten the formation of new foliage. This disease only occasionally does serious damage. I think that sprinkling the foliage with flowers of sulphur or some of the many fungicides would help, but such remedies are not often resorted to, as generally only a portion of the tree is diseased.

**Knots on Pears—Peach Borers.**—M. W., Philadelphia, Pa., writes: "I have a pear called the Anjou that seems to be very thrifty and bears well, but when you eat it, it seems to be full of knots. What is the cause of it? Would like to know what is the best remedy to keep borers out of peach trees?"

**REPLY:**—The knots in the pear are caused by a fungus growth, but I am surprised that the Anjou should be so much troubled as you mention, for it is generally a very free grower and fair yielding pear. Perhaps the tree is not true to name. There is no remedy except to

keep the tree healthy. Better manure with wood ashes, or some equally good mineral manure. The trouble may not be of long duration.—Examine the trees once in spring, summer and autumn, and dig out the borers and apply the wash recommended in these columns for the purpose.

**Yellows.**—L. B. H., Bingham, Ohio, writes: "What is wrong with my peach trees and what is a remedy? I planted some last fall and some this spring. They are in leaf, but the leaves are wrinkled, some red and some yellowish in color. They are very slow to take hold and grow. I examined them at the roots but found nothing. I applied soapsuds and afterwards put coal ashes around the roots. Did I do right?"

**REPLY:**—I think from your description that the peach trees that you bought must have had the yellows, for which there is no known remedy. This is the disease which has destroyed hundreds of peach orchards in many parts of the country. The only preventive has been found to be the burning of all infected trees as soon as the disease is seen. By this means it may be kept in check. New, healthy trees or pits planted where diseased trees have grown will be diseased.

**Apple Scab.**—W. H. G., New Haven, Ky. This is a disease, and is due to the growth of a minute fungus plant in the tissues of the skin of the apple. The microscopic spores (seeds) which produce scab develop much more rapidly in a damp atmosphere than where it is dry; therefore, where trees are crowded thickly together, it is more prevalent than where there is plenty of room between them. Also, it more readily attacks old or weak trees than those that are young and thrifty. Experience thus far seems to show that the best material for preventing the apple scab is ammoniacal carbonate of copper. This is made by dissolving one ounce of carbonate of copper in one quart of ammonia, which should be added to ninety parts of water before using. This diluted solution should then be sprayed upon the fruit as soon as the first appearance of scab is noted, and should be repeated two or three times at intervals of two weeks.

**Bark Cracking.**—D. A., Macoupin, Ill. It is very difficult to tell just what causes the cracking of the bark of young trees in the nursery. Many theories have been advanced to explain it, but we are not much the wiser for them. One thing is known, and that is that the sun plays an important part in the work. It has been found that nursery trees that were not too rapidly grown were freer from it than those that made a very late growth. Trees sometimes have their bark cracked before cold weather sets in. The cracks in young trees generally heal over. Probably covering the cracks with grafting wax would help the process. Trees grown on a south slope or a level land are more liable to crack than those grown on a northern exposure. After the trees are old and commence bearing they make a slower growth, when, if the trunks are shaded, they are not very liable to crack. On this account, in planting out an orchard it is a good plan to incline the trunk and head quite a little to the south-west. But do not incline them enough to disfigure them. It is also well to encourage the branches on the side of the tree.

**Barren Grape Vine.**—L. H., Lockland, Ohio, writes: "I have a small white grape that is a very profuse bloomer. It is on the south side of a porch. Every year it blights in the bloom and fails almost entirely. I have thought the flowers were not fertilized. I never see bees on them. Is it necessary that bees should work on them for this purpose? Last year, in looking over the vine, I saw a very fine web on the bloom of one bunch, and found a small, buckwheat-shaped, greenish cocoon, and suspected it might be the secret after all. Can you tell me what is the matter and what is to be the remedy?"

**REPLY:**—I cannot tell you positively why your grape vine does not fruit, as there may be many causes for such an effect. Some grape vines are staminate, and so, while they grow very strongly and bloom abundantly, they never fruit. Other vines are what are called weakly staminate (many of the Rogers hybrids are so), and such vines do well only when growing near some strongly staminate kinds. Again, it is possible that the blossoms are eaten off by some insect, such as the rose-bug, though I think not. It will be well for you to observe carefully any appearance of insects there may be on it this year.

**Strawberry Bloom Frosted.**—J. R. L., Trimble, Ohio, writes: "Enclosed find samples of bloom and berries from my strawberries. The plants were set last spring. They bloomed well this spring, but blasted. The ground is very fertile. They are in the matted row system. We had two heavy frosts after they bloomed."

**REPLY:**—The blossoms were received in a very dried condition, and so my examination could not be so thorough as I wished. However, the two or three blossoms I could analyze were perfect, having plenty of stamens. I am of the opinion that your strawberry blossoms were destroyed by frost. I have noticed in such cases, while the petals of the blossoms held on for some time, and to a casual observer made the blossoms appear all right, yet, by looking close, one could plainly see that the centers were dark colored. The pistils seem to be much more susceptible to injury than any other part of the blossom. If your bed is in good condition, it would be a good plan to plow under the most of the plants in each row, and get the bed into shape to again make runners, and treat the same. If it were a newly planted bed. Of course you cannot hope for a crop of berries this year from your strawberry bed. Such experiences are very disappointing.

## Our Farm.

## A BUHACH PLANTATION.

**R**HE work of gathering and drying the buhach blossoms is in full blast at the buhach plantation.

About one hundred men are scattered through the fields picking the blossoms. As fast as they are picked they are stowed away about two inches deep in wooden boxes, the boxes being two and one half feet square. Wagons are employed in hauling the boxes to the drying-house because it is alongside of the spot where the drying is done. Certainly, no artificial heat is needed at the buhach plantation to dry anything at this time of the year. The sun's rays come down within the inclosure of big poplar trees with a force that makes it pleasant to stand from under. The trays are allowed to lie there, the blossoms being stirred up by a force of men until they, the blossoms, are fairly cured. Afterward, they are placed on a large platform, about sixty feet square, where they remain until dry, and then are sent to the reduction works, where they are ground into dust. This is done by men who are proof against sneezing, otherwise it could not be done at all. Whether or not it makes flies and mosquitoes sneeze we don't know, but it is certainly the best preventive in use to keep those insects at a distance.—*Santa Clara Valley.*

## LUCK AND LABOR.

Cobden wrote proverbs about luck and labor. It would be well for boys to memorize them. Luck is waiting for something to turn up; labor, with keen eyes and strong will, will turn up something. Luck lies in bed and wishes the postman would bring him news of a legacy; labor turns out at six o'clock, and with busy pen or ringing hammer, lays the foundation of a competence. Luck whines; labor whistles. Luck relies on chances; labor on character. Luck strides down to indigence; labor strides upward to independence.

## EXTRACTS FROM CORRESPONDENCE.

FROM KENTUCKY.—I used to live in northern Ohio, but about four years ago I moved to Taylor county, Kentucky, where I have lived ever since. The soil of this county is limestone, and very productive. Water is pure and abundant the year around. All kinds of crops do well. Some fields of wheat yield twenty-five bushels per acre, and large fields of corn often average fifty bushels of shelled corn per acre. Good farms are selling at from \$8 to \$20 per acre, and every one of them is a bargain. One who has push and energy cannot help but do well here.

C. M.

*Campbellsville, Ky.*

FROM VIRGINIA.—I see communications from all sections of the country. I am surprised at some sections where the crops from an acre only bring \$8 and the land is worth \$10. Now, in this section of old Virginia the poorest land we cultivate will bring \$8 worth. Our market crops bring as high as \$50, and sometimes I have known over \$100 worth sold from an acre. A good many northern families are here, doing well. All kinds of crops do well. We sometimes make as much as thirty bushels of wheat to the acre. Lands can be bought within five miles of railroads for \$5 per acre, with plenty of timber of all kinds, and surrounded with good society, convenient to good schools, churches, post-office, etc., and the climate is very healthful.

W. A. T.

*Rural Bower, Va.*

FROM FLORIDA.—This is known as the mountain region of Florida. Lake county is named for its many lakes. We have a good neighborhood. Six years ago the wild beasts had possession, and were disturbed only by the winter; but now the noisy train and boat can be heard on all sides. Our principal occupation is gardening, although we have many fine groves. We plant our tomato crop as you would corn; I mean, the seed is planted in the field where the crop is grown. We commence planting in October. Some plant fall gardens that come in December and January. Last fall, we brought \$3 and \$4 per crate. Beans for spring market are planted in December or first January. Our winter gardens come in in March and first of April, which is as soon as the winter market opens. There are men in this section that have cleared over \$1,000 on their winter gardens this year. Tomatoes sold

as high as \$8 a crate; beans as high as \$10, and other vegetables in proportion. I have just got returns for nine crates; six sold for \$2 each, and three for \$1 each, which is not bad for the tail end of a market of nearly four months. I would say this to those contemplating coming to Florida: Now is the time to come, while lands are cheap.

C. H. C.

*Minneola, Fla.*

FROM OKLAHOMA.—Ingalls is situated in north-eastern Oklahoma, between the Cimarron river and Council creek. The noted Cherokee strip is only four miles from here, while the Pawnee reserve, Sac and Fox lands and the recently-purchased Iowa Indian reservation are a short distance from this beautifully-situated town. Ingalls, named after the famous Kansas senator, has a promising future. We have several stores, religious societies, a Farmers' Alliance and other praiseworthy institutions. The homesteaders are in favor of a constitutional law prohibiting the selling of Oklahoma land for debt. This part of Oklahoma—in fact, the whole Stillwater valley, is a rural paradise. The still unplowed prairies are adorned with a grand variety of flowers from early spring until nearly Christmas. The cultivated lands promise to yield the staple crops, such as wheat, corn, cotton and sugar-cane, very abundantly. There is no end to all kinds of garden "sass." Every quarter section of the original Oklahoma is taken up, but not less than 8,000,000 acres adjoining Oklahoma will be thrown open to settlement before next spring. About 600,000 acres will come into market this summer. Ingalls is still thirty miles from a railroad, but we expect one through this vicinity by next Christmas. Our whiskey-lovers have to purchase all their "bug-juice" on the sly.

*Ingalls, Oklahoma.*

M. D.

DEVIL'S LAKE.—Devil's lake is the name of a body of water in the north-eastern part of Dakota, which has from time immemorial been held in awe by the Sioux, who live in the vicinity. The Indians believe that the lake is inhabited by evil spirits, and the name, Mini-Wakan, which, in English, means "spirit water," was given it many years ago. The name of Devil's lake was given it by the whites. Weird tales of the doings of supernatural beings, supposed to people it, are numerous, and the truth of many fictitious stories told about it have until late years never been doubted. Civilization is, however, getting in its work in the neighborhood, and is rapidly dispelling the feeling of awe in which the lake has been held by the Indians. There is a modern story of Devil's lake, however, which vies in superstitious fancy with those of aboriginal times. Not only the Indians, but the soldiers at Fort Totten, which is situated on the northern border of the lake, have a firm belief in the existence of a phantom steamboat which is said to ply the waters of "Mini-Wakan." Some weird tales are told of how this airy creation goes puffing up and down the silent lake in the darkness of summer nights, its spectral fires gleaming on the black water, and the heat of its screw wheel keeping up a rhythmic motion that becomes suddenly silent on the approach of a mortal. The first appearance of the phantom steamboat was early in the '80's, when it was witnessed one night by a party of soldiers who were crossing the lake. Many people have since claimed to have seen it go puffing up and down the lake in the darkness of moonless nights, its fires making trails of light on the water, while the throbs of the ghostly engine were distinctly heard.

GEO. E. BARTLETT.

FROM ARKANSAS.—Grant county lies a little south of the center of the state, and contains about 600 square miles. The soil of the uplands is generally of a sandy formation, but produces fair crops of a great many kinds. There is a large amount of creek and river bottom land in the county, but I will speak in particular of Hurricane creek bottom, which is about one and one half miles wide here. The soil is a dark, sandy formation, and when put in cultivation, produces an almost endless variety of products. But there has been very little put in cultivation, because it overflows at times, through the winter and fore part of spring. But by a little work, levees can be built three or four feet high that will protect it from the water, as it hardly ever overflows to the depth of more than two or three feet, and in some places it takes a very high rise to overflow at all. This land will, when cleared and leveled, produce two or three times as much as the upland, and with the same amount of work. Cattle and hogs live in the woods in this bottom the entire year, with no extra care or food; but they do better if they are fed a little through the winter months. Much money could be made here raising cattle and hogs, as they cost very little to raise, and what they bring is almost clear profit. The bottom produces good pasture for cattle and hogs fatten on nuts and acorns. Stock is very cheap now, and it would require but little money to start in the business. Yearling calves can be bought at about \$2 to \$3 a head. Plenty of good land can be bought at \$1.25 to \$2.50 per acre, and some state and government

land much cheaper. There is no mud here to speak of, except in the bottom, which is very bad on account of so much rain. Those who want good land, with good pasture and timber on it, had better come soon, for there is a new railroad coming, and land and timber will soon be higher. The principal timber in the bottom is white oak, hickory and gum, all of which grows to a large size. I came from Ohio, and know the advantages and disadvantages of both places. The people here are very kind and sociable, and like to have good people come among them.

E. F.

*Sheridan, Ark.*

FROM PENNSYLVANIA.—Washington county is the garden spot of Pennsylvania. Here nature seems to have outdone all efforts in other directions and placed all that the heart could wish at the disposal of the farmer. We have a mild and equable climate, and a good a soil as can be found under the stars and stripes. Our soil, when properly cared for, is capable of producing 30 to 35 bushels of wheat per acre; 80 to 150 of corn, 35 to 60 of oats, and 40 to 60 of barley. Timothy and clover mixed will yield from one to two tons of hay per acre. Excellent timber of several varieties is abundant. Nearly every farm in West Bethlehem township, in which the writer lives, has from eight to thirty acres of timber land on it. Locust, the best post timber that grows, is abundant. Coal and wood for fuel are plenty. Coal, of good quality, can be had at from two to three cents per bushel, at the banks, which are plentifully distributed over the county. The country is hilly, and on the tops of the hills and along the streams limestone is plenty. With plenty of wood and coal at hand for fuel, and limestone for the quarrying, it is an easy matter to improve those farms that have been badly used, and they will produce large crops. Land is worth from \$35 to \$110 per acre. For fine stock, Washington county is unsurpassed. Norman-Persheron and Clydesdale are the leading breeds of horses; Short-horn and Holstein, of cattle; Black Top and Southdown, of sheep; and Chester White and Poland China, of hogs. There are many other breeds of horses, cattle, sheep and hogs largely represented here, but the above are the leading ones. Washington county has also been the leading oil and gas producing region of the world for four or five years. Some farmers have been made almost millionaires in a few months from their share of the oil produced by the wells on their farms. Aside from all these natural advantages, we have as good religious and educational privileges as can be found anywhere. Nearly all religious sects are represented here. The following institutions of learning are located in our county: Washington and Jefferson College, Washington Female Seminary, Washington Business College and Triuity Hall Academy, at Washington; Jefferson Academy, at Cannonsburg; and South-western Pennsylvania Normal School, at California. We also have excellent common schools from six to eight months of the year; teachers receive from \$30 to \$50 per month. Work of all kinds is plenty, and wages are good. Farm hands receive from \$15 to \$20 per month, or \$1 to \$1.50 per day.

Scenery Hill, Pa.

E. H. W.

FROM LOUISIANA.—The cost of establishing an orange grove in Louisiana, as given by J. H. C., in June 15th number, is not substantiated by our experience in this locality, where the bulk of the orange crop in this state is grown. Down the Mississippi river, from New Orleans to Forts Jackson and St. Philip, a distance of about seventy-five miles, comprises a district where the orange has been grown to good advantage for more than one hundred years. Lands suitable for orange culture can be bought for \$5 to \$30 per acre; but as only a strip of from two to ten acres in depth from the river is suitable for oranges, and as the land is sold in blocks of an average depth of thirty-seven acres, a large portion of the tract will only be suitable for rice culture or for pasture. After the land has been broken up, fenced and ditched, contracts can be made with reliable nurserymen, who will furnish the very best budded, three-year-old stock, and remove them anywhere, with the roots enveloped in the earth in which they grew, each ball encased in a tight-fitting sack, and plant them in the best manner, so that the tree will scarcely cease growing, and with proper treatment will commence bearing the third season from planting, for from \$70 to \$80 per hundred, the price varying with varying conditions, such as soil, distance to carry, etc. After the trees are planted, the cost of caring for them is rather difficult to give. I believe I am safe in placing it at from \$15 to \$20 annually for each 100 trees in this locality. Budded trees do not withstand the cold any better than sweet seedlings, but are so much superior in other respects that very few sweet seedlings are now planted. To give your readers an idea of possible product, I will state that I have taken an average of two boxes of Maudarin oranges from each of a few selected trees the second season from planting, and which netted \$4.50 per box, or at the rate of \$9 per tree. Of course, such yields are uncommon, and in this instance can be attributed to suitable soil and the most skillful treatment. I have heard it said that it cost \$60,000 to bring Orange Farm

grove into bearing. This for about 13,000 trees. The three last crops (that now on the trees being one of them) have sold for an aggregate of \$6,750, sold while the crop was yet in bloom, or shortly thereafter, for cash down or its equivalent. The oranges of which many of your readers will doubtless partake of next Christmas are now hanging, half grown, on the trees, with the possible chance of loss before maturity, from several causes; but notwithstanding this, nearly all the crops of this locality have been sold, and mostly paid for, at the rate of \$3.50 to \$4 per barrel, dealers taking all risks, gathering and marketing at their own expense. A laboring man, one who can mow, hoe and ditch, may, with a small capital to start with, have a grove to yield an annual income of from \$500 to \$1,000 per year. After his trees are planted it will only require a small portion of his time to care for them, and he can support himself by laboring for others until his trees are in bearing. Plenty of land can be bought at the figures mentioned, and intelligent labor will do the rest. Industrious settlers with more or less capital will be welcomed.

W. S. R.

*Buras, La.*

FROM CALIFORNIA.—San Luis Obispo is considered one of the best dairy counties in the state; in fact, it is one of the best undeveloped counties on the Pacific coast. The dairy business is confined to the coast region—a strip of country about sixteen miles wide the entire length of the county, bordering on the Pacific ocean. This dairy region is a broken country, hilly, and in some places mountainous, with an occasional rich, little valley that will yield immense crops of beans, potatoes, pumpkins; in fact, most all vegetables do extra well. This part of the county is well timbered and watered, a great many springs being scattered throughout this entire belt. Its mineral wealth is very extensive, but almost entirely undeveloped. The leading minerals are iron, quicksilver and bituminous rock, a kind of sandstone impregnated with asphaltum, much used for paving stones in Los Angeles and San Francisco. Fine gold is also found on the beach in the sands that are washed by the waves of the mighty Pacific. In this part of the county rain is quite plentiful—from 20 to 32 inches for the season, which is from the middle of November to April. The portion of the county that lies east of the Santa Lucia mountains, and comprises about three fourths of the area of the county, has less rainfall than the coast side. It was formerly considered a drouthy country, but after it was settled up and farmed, the rainfall has gradually increased, until now there is plenty for all agricultural purposes. A large portion of the country is level, or slightly rolling, and mostly well timbered with white and live oak, though some small pines grow in the mountains. Most of this region is well watered; that is, the part that lies west of the Salinas river, bordering on the eastern base of the Santa Lucia mountains. East of the Salinas river water is more or less scarce, but can be had most anywhere by boring from 30 to 90 feet. Most of the farmers have wind-mills to pump the water. The water is pure and soft, except in the extreme south-eastern portion of the county, where it is more or less mixed with mineral salts. All kinds of grain do finely in this eastern portion of the county; especially is this true of the Estrella plains. The wheat cannot be excelled by any other country in the world. The nights are too cool for corn to do well, and but very little of it is raised. Fruit does well, especially peaches, prunes and grapes. This is as healthful a country as there is to be found anywhere in the United States, and fevers are entirely unknown. There are no storms or cyclones. Land is worth from \$5 to \$10 per acre. Markets are rather dull. Eggs are worth 10 to 12½ cents per dozen; chickens, from \$3 to \$5 per dozen; butter, 10 to 14 cents per pound; cattle, \$18 to \$20 for cows, \$15 to \$25 for steers; horses, \$75 to \$150; hogs, 4 to 5 cents per pound; wheat, about 60 cents per bushel, or, as we always sell it, \$1 per 100 pounds; barley, about 80 cents per 100. Of course, the above prices fluctuate with the San Francisco markets. Freight on grain from here to San Francisco is \$5 per ton. Most of the farmers are joining the Farmers' Alliance, which is spreading like wildfire in California, and promises much good for the agricultural classes.

A. N. R.

*Paso Robles, Cal.*

## Pure Blood

Is Essential to  
Good Health.  
To Have  
Pure Blood  
Take

Hood's  
Sarsaparilla

## Our Fireside.

## A LOVER'S TEST

[We are allowed by the publishers to say that the following poem, from the "Masque of Poets," is from the hand of the late Bayard Taylor:]

I sat to-day beneath the pine  
And saw the long lake shine.  
The wind was weary, and the day  
Sank languidly away  
Behind the forest's purple rim;  
The sun was fair for me, I lived for him!

I did not miss you. All was sweet,  
Sky, earth and soul complete  
In harmony, which could afford  
No more, nor spoil the chord.  
Could I be blest, and you afar,  
Were other I, or you, than what we are?

The sifted silver of the night  
Rained down a strange delight;  
The moon's moist beam on meadows made  
Pale bars athwart the shade.  
And murmurs crept from tree to tree,  
Mysterious whispers—not from you to me!

I stirred the embers, roused the brand  
And mused: on either hand  
The pedigree of human thought  
Sang, censured, cheered, or taught.  
Pausing at each Titanic line,  
I caught no echo from your soul to mine!

And last, when life recast its form  
To passive rest and warmth,  
Ere the soft, lingering senses cease  
In sleep's half-conscious peace,  
The wish I might have fashioned died  
In dreams that never brought you to my side!

Farewell! My nature's highest stress  
Mine equal shall possess.  
'Tis easier to renounce, or wait,  
Haply, the perfect fate.  
My coldness is the haughty fire  
That naught consumes except its final desire!

## A Preeipitated Courtship.

BY ALICE L. CLARK.

My mission to the readers of the *Sunday Chat* is like Mark Antony's traditional attitude to the populace—to tell them that which they themselves do know; and when I tell them that which they do not know, and which I do not know, either, the results range from tragedy to comedy. Last January, in the *Chat's* social department, of which I, Priscilla Plume, am the editor, appeared the following:

"Among the engagements which rumor says are soon to be announced is that of Miss Ethel Arlington, of New York, daughter of Mr. Francis K. Arlington, formerly of this city, and Mr. Theodore G. Wiggswell. Mr. Wiggswell is a nephew of the Hon. George P. Giltedge."

Also:

"Major Peleg Wiggins entertained a number of friends at a masquerade ball on New Year's eve, at his beautiful country residence in Walnut Park. Among the guests from the city were the Hon. George P. Giltedge and family."

I congratulated myself that I should have an "exclusive" on those items; that they would not appear in our rival, the *Saturday Mail*. I was right; they did not appear in the *Saturday Mail*. On Sunday morning I was looking over the *Chat*, and admiring the discrimination with which the printer interspersed among my notes upon the aristocracy such information and advice as, "Allemand & Co.'s malt whiskey is the best," "Buy your spring overcoat at Smoothly's," "For indigestion, take Dr. Whittier's Little Pepsin Pills," "Try Smoothly's suspenders and neckties," when a visitor was announced.

Mr. John Spruce entered, said "Good-morning," and immediately observed, "I always did advise you to try your hand at fiction, Priscilla."

"Well?" I inquired.

"Short stories are an excellent beginning in a literary way. I always felt sure that you had a vivid imagination," he continued, reflectively, "and I really felt hurt that you never took my advice. I've told you again and again, when you are hard up for 'copy,' to make it up out of your own head. Now, this new departure—"

"Oh, dear!" I interrupted, as the meaning of these remarks began to dawn upon me, and I picked up the paper. "What is it? Which is it?"

"Don't be agitated," he replied, pointing to the two items I quoted above. "You have often said that more literary tone and less hard, dry chronicling of facts, would improve this sort of work. Now, there is no hard, dry chronicling of facts about those paragraphs. If originality and imagination are qualities of literary tone, there you have it."

"I suppose you mean that they are mistakes," I said.

"Pure fiction," he replied, unsympathetically. "I told you about the Peleg Wiggins fancy-dress ball myself, I remember, and I said that Jim Giltedge told me, but I did not say that the Giltedges were there. It happens that they and the Wiggins family are sworn enemies. It's a regular Montague and Capulet feud. I have done considerable law business for Hon. George P. Giltedge in connection with the matter, and I know all about it. I will try to convince him that this item of yours was a mistake, and not a practical joke. But

you will probably hear from Wiggins. Really, it was an enterprising bit of speculation to conclude that the Giltedges went to that ball. And about the engagement: Wiggswell is a cousin of my friend, Jim Giltedge, and I happen to know that he has not the pleasure of Miss Arlington's acquaintance. Still, it might be a good match. I suppose you thought it over before you selected her for his wife."

"I meant to write Sumner Bothwell, instead of Wiggswell; they do say that he and Miss Arlington are engaged," I interposed. But John Spruce paid no attention, and mused on:

"Wiggswell is an obliging young fellow. Perhaps he will marry her, since you think best. Now, I wonder how your plan strikes Miss Arlington?"

"I think you had better accept a position on our funny column," I said, bitterly; "and unless you stop laughing, and think of some way to help me out of this fix, beware! I have not yet announced your engagement, but I may select some eligible young woman for you, and put your names in next week's *Chat*. Please tell me what to do. Of course I can announce in next week's paper that my statements were incorrect, but it is so very humiliating, so stupid, so absurd."

Aud I blurred a tinware advertisement with a few tears; only a few, however, for I knew that John Spruce was more sympathetic than he seemed, and would help me in this predicament as he had in others. From our childhood, when we had played together; through our school-days, when he had helped me get my lessons, procured the snakes and tadpoles which I insisted upon having for my zoological researches; rescued me from drowning when I skated into air-holes and fell out of boats, and from being killed when I attempted to ride an unruly horse; through the sad time of a few months ago, when my father had failed in business, and soon after died of heart disease—we had been friends. He had laughed at my mistakes, regarded my mishaps as excellent jokes, but had been, in fact, generous and sympathetic. To my appeal he replied:

"Well, since you were doing your best to follow my advice in these little literary ventures of yours, I shall have to stand by them. I will see to-day what people are saying about it, and decide accordingly, whether you had better bury those unhappy paragraphs in oblivion, or explain them. Say that some of the Giltedges were at the ball, although the Hon. George P. could not be present; and as to the engagement, don't commit yourself further than to look wise and say that time will tell whether or not it is true. Just insist, *comme toujours*, that you are right. Now, I am going to call on Theodore Giltedge Wiggswell and give him my blessing and a bunch of flowers."

Following is what passed when John made his call, as he afterwards described it to me:

"Theodore," he began, "my dear friend, my feelings were hurt to learn the happy news from the newspapers instead of from your own lips; but I congratulate you. Accept my blessing and my boutonniere. Miss Arlington is a charming girl."

"By Jove! Spruce," exclaimed Wiggswell, "what does this mean? Is it some joke that you are at the bottom of? It may be funny, but it's getting me into deep water. What's the point?"

"I do not wish to be intrusive, Theodore, but if you announce your engagement to Miss Arlington in the *Sunday Chat*, I suppose an old friend may be permitted to wish you joy."

Wiggswell actually turned pale. "Is that in the paper?" he gasped. "Why, I do not know Miss Arlington—at least I didn't. Is it possible that—" He seemed too much overcome to go on for a minute, and then said: "It's a queer piece of business. Those society reporters find out everything, and jump at conclusions, and have it printed and illustrated while the parties interested are making up their minds."

"Yes, they do jump at conclusions," John admitted. "Then I infer that you are not engaged to Miss Arlington."

"No; but I wish—that is, I was just going to tell you. I am just home from a dinner at the Copleys'. Mrs. Copley remarked, as we took our places at table, that two vacant places were for Mrs. Arlington and Miss Ethel, whom she expected later, and then she got off something about being surprised at learning the news from the papers, and congratulated me."

"You denied it, of course?" said Spruce.

"Well, no, I didn't; that's the trouble. I was so staggered I couldn't say a word."

"Why, man, what a position to leave Miss Arlington in! What happened when she arrived? Where is your carefully and expensively-acquired *savoir-faire*? Why didn't you say something about it's being a mistake, a rumor, which you wished were founded on fact? What did they say when Miss Arlington denied it, after you had complacently accepted the situation?"

"Well, as soon as my head stopped swimming, and I got my breath, I was going to correct the mistake. It would have been deuced awkward, but I was going to do it. Then Miss Arlington came. Talk about *savoir-faire*! I said I was ill, and left," explained the unfortunate Wiggswell.

"This is a nice mess!" ejaculated John Spruce.

"It is a fix," continued the other, "and I've rather made a fool of myself. The idea of calmly accepting congratulations in that public way, and leaving as soon as my supposed fiancee came! It looks like a rude thing. It looks as if I wanted to give the idea that we are engaged, and left when she came so I should not have to deny it. No matter how much I deny it now, it's deuced complicated. Why, every one was there—the Miltons and the Maypoles, some of the Giltedges, and the Gilligs. It will be talked all over town before night."

"Were there any Wigginses there?" inquired Spruce.

"No—on account of the Giltedge-Wiggins feud—only Mrs. Arlington and Miss Arlington," he replied.

"What, you don't mean that Miss Arlington is a Wiggins? Another Wiggins-Giltedge complication?"

"She is a niece of Peleg Wiggins. I do not quite understand you, Spruce."

"A Montague and a Capulet," murmured Spruce.

Wiggswell reddened. "What do you mean, John? Have you heard—yon were not at the masquerade, were you?"

"No; were you? What has that to do with it? Come, I see there are more complications in this affair than I thought. Make a clean breast of it, Theodore."

While Theodore hesitated, there came a hasty knock on the door, and Jim Giltedge entered, elegant, conventional, congratulatory.

"Ah, Theodore, this is a surprise. I had hardly expected that any of us would marry into the Wiggins family. I read the notice in the paper this morning, but supposing you would have consulted my father, if it were true, passed it over as one of the *Chat's* atrocious blunders. But hearing you accept congratulations at dinner, and then Miss Arlington accepted the situation, very prettily, too. By George! I quite admire your taste, Theodore."

"Miss Arlington denied it, of course!" exclaimed Spruce and Wiggswell, in concert.

"Denied it! Why, no. Mrs. Copley spoke of having congratulated you, and Miss Arlington blushed very prettily and said she supposed you denied it; and when Mrs. Copley said no, that you seemed quite overcome with your good fortune, Miss Arlington looked confused and charming, by George! I saw that she did not know just what to say, so I rose to the occasion with something graceful, you know, and the conversation turned. I left as soon as possible, fearing you were seriously ill, else you would not have left in such an odd way. 'Wiggswell always was eccentric,' murmured Spruce.

"By the way, Theodore," continued his cousin, "how are you now? You look flushed. Let me feel your pulse; very high. You had better take something cooling. Oh, yes; I was going to say I will go with you to call on Miss Arlington any time you like, and I will try to make the matter right with my father. The Hon. George P. hates Peleg Wiggins, but I dare say, when he knows that it's all settled, he will give you his blessing. I tell yon, Theodore, you have fever; I never saw you so flushed in my life."

"Oh, she isn't—that is—I'm not, I mean. I haven't. It's all a mistake. There's no ground for it, Jim; not the least," cried Theodore, desperately.

"Well, perhaps not," said his cousin; "but you look it. High pulse, flushed face, eyes rather wild, mean fever. I'm on my way to an appointment at the club, and will send Pilkius to see you as I pass his office; you must have a doctor. I will call in again to-night, and if you are no better then, will stay." And before Theodore could protest, Mr. Giltedge had gone on his way.

John Spruce leaned back in his chair and laughed, but Theodore sat eying the cigar which he had allowed to go out in his hand in perplexed silence. Suddenly he exclaimed:

"Worse and worse! It's too late to make Jim come back for an explanation, and he will tell all the fellows at the club that this engagement is a fact. It looks as if I were doing my best to circulate the rumor. How can I ever explain it to Miss Arlington, or to any one?"

"Perhaps no one will believe it, anyway. There's a general impression that Miss Arlington is engaged to Sumner Bothwell."

"What! Do you mean it—that insignificant, little fellow? He's an artist, isn't he? Oh, it's impossible, it's preposterous!" exclaimed Wiggswell.

"No, not at all preposterous," his friend replied. "Bothwell is a rising artist. He will be famous in a few years. He knew Miss Arlington abroad."

The gloom deepened in Wiggswell's face.

"You see, John," he said, "if they had said I was engaged to one of the girls in our set here, I should not have lost my presence of mind, and allowed the matter to get so complicated and misunderstood; but there are circumstances about this case that—well, in fact, I have escaped for twenty-eight years, John, but the game is up. I am in love with Ethel Arlington, and if this development in the situation spoils the little chance I had, it will be the most serious thing in my life."

"Why, where have you seen her? You told

me last week that you didn't know Ethel Arlington, when I told you she was coming from New York to visit friends here."

Wiggswell unlocked an elaborate jewel-case which stood on the table, and took from its solitary resting-place therein a handkerchief. He carefully unfolded the bit of embroidered linen and lace, and gazed pensively at the initials in the corner—E. A.

"You remember I went to New York for a visit about a year ago, John? This is a souvenir of that occasion. My mother has a second cousin there, a Mrs. Browning, whom I had never seen. I left a card at her house, to please my mother, and the next day found myself honored with the information that Mrs. Browning was at home some evening or other, I forgot the date; now, but I accepted, and went quite late, on the evening mentioned.

"The rooms were rather crowded, no one in particular seemed to be receiving, and I saw no one whom I knew. Most of the ladies had on bonnets. Mrs. Browning, being the hostess, must be one of those who had not. I figured a little mentally, compared her age with my mother's, and concluded she must be past fifty. I picked out a jolly-looking, little, old lady with gray hair, who was talking to several men; probably she was Cousin Browning. I advanced; the men stopped talking; she looked at me without a sign of recognition, but I expected that. I held out my hand and said: 'My name is Wiggswell; so awfully kind of you to invite me, Mrs. Browning.' 'Oh, I am not Mrs. Browning; she is in the other parlor, I think,' she replied. The men smiled, and I hurried into the next room. It was no use to guess which of the solid, rather unhappy-looking men standing about was Mr. Browning, so this time I selected a different kind of hostess—a tall, severe-looking woman, bonnetless, and undoubtedly past fifty. I approached her confidently, and said: 'Mrs. Browning, is it not? My name is Wiggswell. So kind of you—' But I was down on my luck; she wasn't Mrs. Browning, either. I think she offered to find the hostess for me, but I was disgusted, and went and leaned against the wall. I was just weighing the claims to the honor of being my hostess of two other women—one tall and stout, gotten up in a purple velvet, and the other small and dressed in black, both without bonnets, and both past fifty—when I suddenly realized that a pretty girl opposite me had been watching me ever since I entered. She was probably pretending to be amused at her companion's conversation, but I saw that she was laughing at me. I blushed, my collar felt limp, and I felt as if my clothes did not fit. I think my hair began to stand on end. I glared wildly around. Was it derision or sympathy in the young woman's smile? Perhaps she was the hostess, although her youth and her bonnet forbade the idea. And although I was so unhappy, and she evidently thought me absurd, I was conscious of vaguely wishing that she were Mrs. Browning, and hence my cousin. Still, in that case she was married.

"I dare say that while I was pursuing these speculations I looked as if I were losing my mind, for she suddenly spoke to an elderly lady near her, evidently her mother, and coming up to a lady who stood quite near me, said, quite pointedly, 'Mrs. Browning, we will bid you good-evening,' and murmuring the usual thing about a pleasant evening, left the room. I shot a glance of gratitude and admiration at her as she spoke, succeeded by disappointment as she turned to go, though it has since occurred to me that she was obliged to go, having said good-by. I paid my respects to Mrs. Browning, who was very unlike any of the hostesses I had selected, and she was exceedingly kind.

"But I could think of nothing but my deliverer—the beautiful girl with the merry eyes and sweet smile. I picked up a handkerchief which lay at Mrs. Browning's feet. It was not hers, she said, and I replied that I would leave it in the dressing-room, and that it would no doubt be called for. I knew that it belonged to my lovely protector, and I did not leave it in the dressing-room.

"After the reception I assiduously made party calls on Mrs. Browning, hoping to meet the beautiful being who had come to my assistance, but she did not appear. How should I find out about her? I did not know her name, only that the initials were E. A. She did not appear, and I began to fear that I should be reduced to saying to Mrs. Browning, 'Who was the young lady who said good-by to you just before I spoke to you on the evening of your reception? Her initials are E. A. She is very beautiful, and evidently kind-hearted, with a well-developed sense of the ludicrous.' But the happy thought came to me to examine the photograph album. I opened it with trembling hands. There was her picture. 'Ah!' I said, 'who is this pretty girl, Cousin Browning?' She replied: 'This is Ethel Arlington. She has gone to Europe, to be gone a year or more.' That finished my series of party calls. I came home, until lately I did not know whether or not she had come back from Europe. Last Friday evening I went down to the Wiggins' fannedress ball."

"Then there were some Giltedges there," remarked John Spruce, in an undertone.

"What did you say, Spruce? Nothing? I just went down there for fun—of course, I wasn't invited—and I intended to slip away soon. It does not seem so much of a joke, now."

"Well, Theodore, my boy, in the course of twenty-eight years you have been the hero of no end of unique exploits, but I do not recall your ever doing anything so mediæval as going unmasked to a ball in a private house. But go on; what else did you do in your role of modern Romeo?"

"By Jove, John, you have hit it! I found Juliet. I had no business to be there, much less to dance, but I did. I danced with a lovely girl in an old Italian costume. There was something fascinating about it. She seemed like some one I knew, but I could not recognize her. I danced with her two or three times, and suddenly she laughed and seemed to recognize me, though she did not speak my name. When the quadrille was finished, we went into the conservatory. She took off her mask, and I was simply overcome to find that it was Ethel Arlington. I unmasked, of course, and introduced myself, and thanked her for coming to my rescue at Mrs. Brownling's reception. She seemed glad to see me, and we compared notes about what we had done since. She told me about her visit in Europe, and I told her that I had watched the steamer lists ever since to see when she returned, and missed her name after all. I kept thinking that I ought to go, but—"

"Parting is such a sweet sorrow," observed John.

"Beg pardon, John? You did not speak? I had to tell her that I had not been bidden to the feast; and when the company unmasked, and I saw the Major and Mrs. Wiggins bearing down upon us, I disappeared in the crowd to save Miss Arlington the embarrassment of presenting an uninvited guest. Now, in addition to having appeared in that erratic manner, comes this absurd item in the paper, and my subsequent idiotic behavior at dinner. What do you think, John—is it a hopeless case?"

"Hopeless! Why, Theodore, I congratulate you once more. You ought to treasure that newspaper item, along with the handkerchief in the jewel-case. It has fought half the battle for you. By this time Miss Arlington has considered you as a possible fiance, and there's nothing like getting used to an idea. Strike while the iron is hot. Go and make yourself master of the situation. The subject is opened up for you as gracefully as possible." Then, dropping his usual jesting manner: "I mean it, Theodore. Go and see her to-day, and propose to her as soon as possible. I wish you happiness, my dear fellow." And shaking him warmly by the hand, John Spruce left him without another word.

On Sunday afternoon I walked up to the house where Miss Arlington was visiting, reflecting as I went on my reportorial misdeeds. In writing up lists of persons present on notable occasions I had put in the absent, the unmasked, the dead, and left out personages of stupendous importance: I had once dubbed the Rev. Priestly "Major," and reported him on the wrong side of a temperance discussion; I had dressed a debutante in black velvet, *en train*, and her mother in white tulle; I had reported the inventor of a patent soup preparation, the *chef* of a hotel, as being prominent in a certain *recherche* social affair. These and similar crimes rose before me like Banquo's ghosts, and I had composed quite a conscience-stricken apology for Miss Arlington's benefit by the time I found myself entering the drawing-room, in obedience to the servant's suggestion that Miss Arlington would be there presently to see another visitor who awaited her. As I glanced around to see who the other visitor might be, I heard Miss Arlington's voice in the library adjoining.

"Ah, how do you do, Mr. Wiggswell? I am glad to see you. Mamma and I were sorry that you were obliged to leave the Copleys before we came. How very strange this talk is, about an engagement between us! Can you explain it at all? It was so very odd for it to appear in the *Sunday Chat*."

"I cannot explain that, Miss Arlington, but I particularly want to apologize for seeming to confirm what I had no right to, at dinner. It was stupid, very. I will take pains to correct any false impressions I have expressed to-morrow. It's all very awkward. I—" Suddenly his voice changed. "Ethel, I wish it were true. I love you. Every one thinks we are engaged. *Suppose we don't deny it!*"

"Oh, we must deny it," came the answer, in an astonished tone. "Too bad," I thought; but then she added, so low that I scarcely heard it, something which sounded like, "At least for the present."

As I slipped out the door I glanced into the library. Evidently, Theodore had heard and comprehended even better than I, Ethel's concession, and it was not wholly the light of the setting sun which had brought the color to his cheeks. A ray of red gold sunshine fell like a happy omen on their clasped hands. On the door-step I met John Spruce, who asked if there were tears in my eyes, and at my suggestion turned to walk home with me, instead of calling on Miss Arlington.

"John said I, impressively, "Ethel Arlington

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ton and Theodore Wiggswell will deny their engagement, *for the present!*"

"What! you don't mean that it's true, after all? I know it isn't."

"Yes," I assured him; "their engagement is soon to be announced. I was right, *comme toujours*." Then I explained more fully, and added, "You see, I am not such a marplot, after all."

John Spruce assured me that I was not a marplot, but he took the opportunity to urge me to give up my profession and follow out other plans which he proposed. In fact, he said many things which suggested a state of mind similar to Mr. Wiggswell's, and I found that changing the subject four times would not alter his train of thought. When we arrived at home he accepted a far from pressing invitation to come in, deliberately walked into the parlor, and said:

"Now, Priscilla Plume, it is no use to try to evade the subject any longer. We have practised your theories about your ability to be independent, and mine to be patient, long enough to have demonstrated them beauti-

fully. I consider both propositions proved. I decline to act my role any more. You know I am going West next autumn; I want you to go with me. Shall we consider it settled?"

I must have been thinking of Ethel Arlington, to have replied, as John says I did, "Well, yes, for the present."

He did not seem to think me nearly as obstinate as usual, and when he said "good-evening," referred to some promise, which I suppose that there is no doubt I had made, about the last of June.

The months hastened by. In May I wrote a long description of the Wiggswell-Arlington wedding. That was my last reportorial work. To-morrow, as the *Sunday Chat* might phrase it, the marriage of Miss Priscilla Plume and Mr. John Spruce will be solemnized. Mr. and Mrs. Spruce will go to the Adirondacks for a short trip, and next fall will settle in the West, where Mr. Spruce will continue the practice of law.—*Harper's Weekly*.

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# THE FARMER A SKILLED LABORER.

Viewed from the lofty standpoint of the New York Hod-carriers' Union, considered from the hall of the Philadelphia Billposters' Protective Association, the prairie farmer is simply a clodhopper. He is a man who decides to have corn, wheat and potatoes, instead of wild grass, grow on a certain piece of land, and plants the seed that will produce them.

In point of fact, more knowledge and skill are requisite for prosecuting his craft than that of any city artisan. It requires more skill to handle a plow than a trowel. It is more difficult to manage a reaping machine than a machine that turns out brick. Greater knowledge is needed to sow grain than to move switches in a freight yard. Much more information, experience and skill are needed to raise tobacco plants, to cultivate them, and to properly cure the leaves, than to make them into cigars. Laying drain tile is a more difficult art than laying brick. Properly to remove a fleece from a sheep demands as great dexterity as to shave the beard from a face. The successful farmer is necessarily a skilled laborer. He is master, not of one trade, but of many, and a long time is required to learn each of them. He is also a merchant, and to be prosperous he must be a Judge of the quality of many things, and know how to buy and sell them to the best advantage.—*R. Welch, in the Forum*.

## Our Household.

## GRANDMOTHER'S SHAKER BONNET.

Dear grandmother's well-worn shaker—  
We found it one dark, rainy day,  
Down under the garret rafters,  
In an old bandbox put away:  
With childish glee we brought it out  
And standing by her old arm-chair,  
We told her how we pitied girls  
Who had such horrid things to wear.

But grandmother looked grave, and said:

"I wore that shaker years ago,  
When I was but a little girl,  
And used to go to school, you know.  
It brings to mind, now, many things,  
About the days when I was young,  
When in the entry, on the peg,  
Right next to Mary White's it hung.

"She was my dearest school-girl friend,  
Together days and days we played.  
By Deacon Palmer's old rail fence,  
At noon time we our play-house made.  
From acorn cups we drank our tea,  
From bits of broken china ate,  
Our dolls were made of hollyhocks—  
Such things, I know, are out of date.

"But we had fun; I sometimes think  
More than girls now, with all their store  
Of costly dolls in fine array,  
And pretty tea-sets by the score.  
Those olden days were happy ones!  
But they are gone, and Mary White  
Has been in heaven forty years.  
Strange, I should dream of her last night!

"Was there a boy in school I liked  
A little better than the rest?  
You ask; oh, yes, 'twas Daniel Barnes.  
Of all the girls he liked me best.  
We used to walk two miles to school.  
He'd come across the lots and wait  
Till mother put my luncheon up,  
Swinging on father's farm-yard gate.

"Where is he now? I cannot tell;  
His folks moved off to Illinois.  
I wish I knew how he turned out;  
He used to be a likely boy.  
Now, children, put the shaker back,  
I've kept it years and years, you see;  
It brings to mind, though now, I'm old,  
The little girl I used to be."

## PRISCILLA, RUBY AND NORA DRESSES.

The Priscilla is a quaint little dress of cashmere, fine cloth, or nun's veiling, set in accordion plaits, the pattern being arranged for children from four to eight years. It is somewhat in Kate Greenaway style, and consists of a long skirt entirely of accordion plaits arranged into a waistband. The waist consists of a lining, front and back, covered with a full front and back of material set in accordion plaits. The sleeve, in coat shape, finishes with a small cuff, while the neck is put into a band collar. The three capes, made of the same material as the dress, form a pretty addition for outdoor wear. Use four yards of cashmere.

Another quaint style is shown in the Ruby dress, for children of four to eight years, and which is suited to pongee silk, spotted silk, sateen, washing materials, etc. It is a novel little dress, and suits some children to perfection, the pattern being arranged with a deep yoke back and front, to which the full skirt part is gathered. It falls perfectly plain nearly to the ankle, the lower edge being hemmed, then set in narrow tucks, while the neck is put into a band collar. The sleeve is gathered into the arm-hole, and again midway between here and the elbow, then caught in to form a puff with a hand of material, from whence the fullness is brought down to the waist, where it is again gathered, leaving a tiny frill to fall over the hand. It will take six yards of 27-inch material.

The Nora dress, in Greenaway style, is suited to children of four to eight years, the pattern consisting of a short waist bodice cut with a back and front, and which, from the neck, has a plaited back and front put on, around which is a finely plaited ruffle, lending the effect of a deep, round yoke. To the waist gathers the full skirt, the join being hidden by a ribbon which is brought around the waist and tied in loops and ends at the side. The lower edge is turned up and finished with a feather stitching, while the coat sleeve has a small cuff. It will take five yards of 24-inch material.

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tions which sometimes follow. This old remedy has met the approval of two generations and is to-day as popular, safe and effective as ever.

## HOME TOPICS.

A DELICATE OMELET.—Beat the yolks of six and the whites of three eggs until they are very light: take one cup of cream (milk will do) and mix with it one small spoonful of flour, and add salt and pepper to taste. Heat a spider, and melt in it a large spoonful of butter; when the butter is hot, pour the eggs and cream in and set it in a hot oven. As soon as it sets, pour over the top the whites of three eggs beaten to a stiff froth. Leave it in the oven until it is a delicate brown, then slip it carefully out on a hot platter, and serve it immediately. This is a delicious dish for breakfast, on a hot, summer morning.

HOT WEATHER HINTS.—The best way to keep the house cool is to have it open in the early morning, and then shut it up before the sun is high. Outside blinds on a house add much to its coolness; but if you haven't these, then have the windows shaded with trees and vines, and during the middle of the day keep the windows closed as much as possible, and the shades down. Open the house again when the sun is nearly down, and let the cool, evening air in. A cellar will be not only much cooler, but drier, when managed in this way. If it is kept open in the daytime, the cooler air of the cellar will cause all the moisture from the outdoor air that comes in to condense, and the walls will be covered with moisture, like the outside of a pitcher of cold water on a hot day.

Do all the cooking for the day in the early morning. Vegetables, as beans, beets, peas, etc., can be cooked then, and if covered tightly, will keep warm enough

neighbor does so. Perhaps she is stronger than you are. If you are a nursing or expectant mother, be doubly careful. If you overwork, not only you must suffer, but the little child as well. Farmers think of this in their stock raising, but too many are sadly neglectful of the same rules with their wives and children.

Not long ago I heard a story of a farmer calling his wife to the door to see how nice "Jennie" looked, saying, "I am going to have her shoes taken off, turn her into pasture and let her rest till her time comes." The poor wife turned away with a sigh, saying, "I wish I could have my shoes taken off and rest until my time comes." But there was no rest for her. She must do just as much work as ever; must wash and iron and cook when the very smell of food was nauseating, and besides this, do the extra work of preparing the wardrobe for the expected little one. Is it any wonder that so many women feel, as I have heard them say, "If it was not for my little children I would gladly go to that long rest which knows no waking?"

I wish every husband could be brought to think of this, and be more thoughtful and tender of the mother of his children. No doubt it is want of thought in many cases. If the wife makes no complaint, they think all is well. Why do they not complain and assert their rights? Because they think "if he does not love me well enough to see that I am working too hard, if I am not as much to him as his horse is, I do not care how soon the end comes." I do not say that this is the right feeling,



PRISCILLA, RUBY AND NORA DRESSES.

for dinner. Some hot day try a potato salad instead of hot potatoes, and see if it is not relished by all. Instead of hot tea or coffee, try these cold. If you do not have ice, you can cool it very nicely by putting it into a bucket or jug and hanging it in the well.

It saves a great many steps to have a cupboard which can be raised from and lowered into the cellar from the pantry—a dumb waiter. If this cannot be arranged, a cool closet can be made in the pantry by removing the floor of the cupboard and putting wire netting in the place of it. This will not be quite as cool as the cellar, yet it will be cooler than the pantry.

TAKE CARE OF YOURSELF.—Every woman who is obliged to do her house-work, as many are on the farm, because it is so difficult to get help there, ought to save themselves every step that is possible. Remember, if you are mothers, your highest duty is to your children. If something must be neglected, let it be the work, and not the children. To be the best wife and mother, you must not let yourself work beyond your strength; you must have some time for recreation. Don't do all you think you ought to do, but just what you are able to do. Don't think you must do such and such things because your

but many women will bear me out in the statement that it is very often the one which is in their hearts if not on their lips.

MAIDA McL.

## CUCUMBERS.

I've never been able to have a cucumber vine on the place, because the bugs destroy them before they are any size at all. A long time ago I read a fabulous story something like "Jack and the Beanstalk," of some one planting a few seeds in a half barrel set outside the kitchen door. It was watered with all the cleanest throw-away water—not hot suds, of course—and from that vine this person harvested cucumbers, and cucumbers, and pickles for all the time use, pickles to put up for winter and—well, it didn't say they supplied the neighboring pickle factory, which was all that saved it from being a fish story. So this year I am trying it. My vines are beautiful, only they are full of ants.

John says I must find the nest and lift some of the earth from it and pour in a solution of bisulphide of carbon, then pack the earth back on it again, and that will settle the ants. This is an article used very much in the West to get rid of gophers, prairie dogs, etc.

The vines I propose to keep off the ground by a frame, and if I raise enough to keep the green grocer supplied I must tell you of it in the fall.

Did you ever try canning sliced cucumbers to use early in the winter? They are very nice. Slice them as you would for table use, let them lie in cold water a few minutes, then put into glass jars and add a little salt and pepper as you put them in, then fill the jar with cold vinegar and seal tightly.

CUCUMBER SALAD.—Slice and lay in salt water a few minutes, then lay in a glass dish, pour over them a little sweetened vinegar and a cupful of rich, sweet cream.

CUCUMBER CATSUP.—Take nearly ripe cucumbers, grate them, season with pepper and salt, pack into a glass jar, and when nearly full, fill up with cold vinegar. This is nice with cold meat.

CHRISTIE IRVING.

## MODEST HOMES—SOME PRETTY INTERIORS.

Now that the weary work of house cleaning is over, we can find time to enjoy what we have accomplished in our own homes, and make a few calls on our neighbors. It gives one a zest for the long, hot, summer days to stop a little while and rest in one of these cool, clean rooms.

A pretty dining-room I have in mind has a new floor of Georgia pine, which has been oiled several times, and henceforth the mistress expects to keep it clean and "shiny" by washing it once a week in a little skinned, sweet milk. She has a large table-rug, or crumpled-cloth, of ingrain

carpet that is tacked at each corner, and several smaller rugs scattered here and there about the room. The walls are newly papered with thick cartridge paper of two shades; the main wall of a light tan color, with a three-foot dado of old rose. Of course there is a "liuer" to head the dado, and a deep, rich border at the top. The ceiling has a small design in gilt on cream, of the ordinary wall-paper.

The bay window has a homemade window seat with a cover. This is upholstered in worsted goods the shade of dado. A large, soft cushion the size of the window-seat is covered with this goods, and a double strap of the goods securely tacked on is a means of raising the lid. Inside this box she keeps her mending and other sewing that is cut out all ready to make. Then, with the sewing machine on one side, and a comfortable rocking-chair on the other, it makes a cozy corner. Simple drapery curtains of scrim lace stripe hang from an ash pole with rings, and between the curtains is a delicate, little hanging-basket of pressed ferns.

The hanging lamp-shade, which is of plain white porcelain, has a pink cover or drape of filmy, lace-like texture.

There are pictures on the wall in pastel and oil, of her own execution.

On the large, cherry desk in one corner are some stuffed birds in natural positions, showing that the "good man of the house" must have a taste for both hunting and taxidermy.

The ice-box, which is quite an ornamental accessory, fills another place.

Chairs of various kinds, paper-racks, the dining-table, clock and mantel about complete the list of furniture.

I presume the lady would feel quite indignant if I failed to mention her door with swinging or reversible hinges, for it is noiseless, and a slight push or kick will open it either way and allow one to pass through with both hands full.

The outside sash door has curtains of imitation China silk in a lovely shade of salmon, with sprigs of large white chrysanthemums over it. The ransou over the door has a curtain of saffroned at top and bottom, and drawn down close.

One's bed-room for summer should be free from heavy draperies or too much furniture. I know of a small room containing only the bureau, bed-sad, wash-

stand and two chairs. Yet, with a small figured carpet in blue and gray, and dainty sash curtains, the room seems larger than it is.

My friend has a wide, sash ribbon of blue, with a center stripe in Roman style, drawn across the top of mirror, not exactly straight, but with a rosette at one end and a loop at the other; it has a pretty effect.

Above the washstand hang two wooden towel-rings in cherry and ash, tied with pink and blue ribbon. A towel, with a handsome initial embroidered in one end, is folded and drawn through the upper ring, and a towel for immediate use hangs in the other one.

Toilet-cases of various kinds are on the bureau, and a "pin-wheel" of blue satin on one side, with flesh color painted with daisies on the other. The pins are stuck in the edge of the wheel, of course, between the pasteboards.

One's parlor depends so much on one's means and taste, that no two are alike. Hard wood floors and rugs, instead of carpets, are all the rage, now, and it is quite a sensible fashion in a country where moths and carpet-bugs flourish.

In summer, I like to see sash curtains of some light material, even if one has long, lace curtains.

Try to have at least one rattan chair for the tired, heated caller, as they look so inviting.

Fancy work should be of light, semi-transparent nature, and try to keep fresh flowers in sight, but no flies.

Wyoming. EFFIE WHIPPLE DANA.

#### PLANTAIN LEAVES.

We have often wondered if every one was well acquainted with the common plantain that grows so abundantly in all parts of the country, and know some of its medicinal properties. It is one of our household remedies.

The head of our house was bitten by a dog, recently, when away from home. Upon his return we immediately bathed the limb and applied the leaves, well wilted by pouring hot water over them and pressing in the hand quite firmly. They drew out all the poison, and the limb is now healing nicely.

Our son bruised his toes, as boys will do. We applied the plantain, changing it night and morning, with very satisfactory results. Boys, remember, a bruised or injured toe or finger—and what boy don't have both?—can often be restored and much pain avoided by simply washing the affected part and tying it up in well-wilted plantain leaves. AUNT BESSIE.

#### COLD MEATS.

Economy is desirable in every household, but in order to have a variety of acceptable dishes made of fresh meats, it is very necessary in the farmer's household to serve all the cold, fresh meats, as the remoteness of many country housekeepers from market renders it impossible for them to procure meat at all times.

In the opinion of many people, cold meat may be made more agreeable, when properly prepared, on its second appearance than on its first, but, of course, much depends upon the mode of dressing and serving. Every cook knows, or thinks she knows, how to make hash, and hash appears day after day, a greasy, unpalatable dish of which the family soon tire, and of which the housekeeper says: "Hash is never eaten by our family and it is useless to make it." The cold meat is sliced in thick, uninviting slices with snet and, perhaps, gravy over it, and it, too, falls under the bane of displeasure, and cold meat is voted an uneatable dish, and in such households the leave-overs are thrown away or given to the dog, while the family is deprived of many delightful and healthful dishes. The following recipes will all be found excellent and economical as well as very easy to prepare:

RAGOUT OF BEEF.—Cut slices from the leanest part of a rare, cold roast of beef. Make a rich gravy and flavor with thyme, sweet marjoram, parsley, black pepper and a tablespoonful of currant jelly; thicken with grated crackers and a lump of butter. Have a frying-pan very hot, put the rare beef in it without grease; turn quickly, take up, lay on a dish, pour

over the hot gravy. Garnish the dish with celery and sippets of toast.

SAVORY STEW.—Take some bones of beef from which the meat has been cut, break in small pieces, then mash, put in a pot and cover with cold water. Boil and skim, season with salt, pepper and allspice, add two turnips, two carrots, two heads of celery, two onions and one Irish potato, all cut fine. Skin out the bones, cut up the meat which has been trimmed from them and put in, let heat and serve.

BEEF COLLOPS.—Take any cold meat left over. Cut in pieces three inches thick and four long. Pound them flat. Sift flour over and fry brown in butter, then lay in a sauce-pan, cover with brown gravy, mince half an onion fine, add a lump of butter, rolled in flour, a little pepper and salt. Stew slowly, but do not let boil. Squeeze in the juice of half a lemon and serve very hot with pickles.

HOTCH POTCH.—Take cold lamb or mutton, cut up with equal parts of cabbage, lettuce, turnips, potatoes and onions, put in a stew-kettle with a slice of fat bacon, a pod of red pepper and a little salt, let cook slowly until the vegetables and bacon are done.

COLD BEEF STEW.—Cut the lean of cold, cooked beef up with scraps of cold, boiled ham. Put in a sauce-pan with a little soup stock or meat gravy. Stew slowly, add a chopped onion, one head of celery with pepper and salt. Thicken with a tablespoonful of butter rubbed in a tablespoonful of flour, add three thinly-sliced potatoes and stew until done. Serve hot.

FARMER'S STEW.—Take any cold, fresh meat, cut fine, put one tablespoonful of currant jelly, one of walnut catsup, one of butter, half a chopped onion and a teaspoonful of strong vinegar in with it, add pepper and salt. Stir over the fire for fifteen minutes and serve with cucumber pickles.

#### WARMED-OVER BEEF.

CUT from the remains of a cold roast or boiled piece of beef, the scraps of lean; cut also some thin slices of fried bacon and put with the beef, season with sweet herbs, salt and pepper. Stir all together, then sprinkle the meat thickly with flour and pour over soup stock or meat gravy. Let boil and dip some slices of buttered toast into it, and put them on a dish, and set to keep warm. Let the meat and gravy boil up once. Spread on the toast and serve with gravy around.

BREAKFAST STEW.—Mince some cold veal fine, stew five minutes and put boiled rice around the dish, set in the oven to brown. Garnish with hard-boiled eggs.

MINCED CHICKEN.—Take cold chicken, mince fine, add half as much chopped ham and stale bread crumbs as you have chicken, moisten with cream; season with pepper and salt. Put in a baking-dish and spread butter over the top, set in the oven to brown.

ESCALLOPED CHICKEN.—Cut the meat from the remains of a cold chicken, chop and mix with it as much crumbed bread as there is chicken, season with salt, pepper, sage, sweet marjoram and thyme, put in a baking-dish, pour over some chicken gravy and a little melted butter. Add some grated crackers to a beaten egg and a little milk and spread over the top to form a crust. Bake half an hour and serve hot.

CHICKEN SANDWICHES.—For lunch or tea. Spread some thin slices of bread with butter and a little dressing made of melted butter and vinegar. Put a layer of chopped celery and a layer of minced chicken. Cover with another slice of bread and butter.

MOCK TERRAPIN.—This is an elegant dinner dish. Mince some cold veal, sprinkle with salt and a little cayenne pepper. Mash the yolks of four hard-boiled eggs, mix with half a cup of cream, a small wine-glass of grape jelly, one

grated nutmeg, a tablespoonful of butter rolled in flour and half a teaspoonful of made mustard. Stew five minutes and serve on hot toast.

BREAKFAST TOAST.—Chop cold, fresh meat and cold, boiled ham together, put to cook in a little water, add half a teacup of cream, a tablespoonful of batter and flour each, with one beaten egg, stir over the fire until thick; season with salt and pepper. Pour over slices of buttered toast.

HAM BALLS.—Chop fine some cold, boiled ham, add an egg for each ball and a little flour, beat together. Make in balls and fry in hot butter.

ELIZA R. PARKER.

#### TALKS TO THE JENNIES.

BY MRS. RICKETS' DAUGHTER.

"Here it is the latter part of July and I am, like Miss Flora McFlimsey, with nothing to wear," said poor, perplexed Jennie Baxter. "I ought to have been planning a covering for my frame away back in March."

Well, Jennie Louisa, don't worry. You are beginning to spoil the shape of your mouth by fretting; it has an abused droop, already, at the corners. You are supplied with best dresses, I see. What you lack is just what I need.

Suitable dresses for afternoon at home, or some becoming and not too nice suit to wear when we run down street to the butcher's, baker's or post-office. We agree on one point. We both buy little in wash goods. I've just two wash dresses for housework in tea-gown shape. In the stores I see pretty stuff so cheap. A popular goods, worth fifteen cents per yard and wide in the bargain, called outing flannel, is nice, though "divil a bit" of flannel is there in it.

Another new fabric called pineapple cloth is a well-liked wash cotton for dresses, same price of the other.

I am my own laundress, so

I try to be saving of washings.

I've a few cotton dresses

I've had for years.

A pink zephyring ham, plain and plaid combined, which I still wear because it pleases

Josephus; he calls me sweet sixteen and declares that it

knocks ten years from my age.

It has a pink, shirred basque and mutton-leg sleeves, which, for a change, I often wear with other skirts. Full sleeves are so suitable

for slender persons. I shall wear pink as long as I can till I get away up among the "sere and yellow leaves," till street gamins say of me: "Who is that decrepit, old critter in pink?"

The plain, pink basque of this dress I wear under a baby waist, tied over the shoulders with rose ribbons. I mean a dress of figured linen lawn is the dress that is tied on shoulders, plain, full shirt and full, low waist.

My best summer dress is of black lace, made over an old, speckled silk that Aunt Jerusha gave me. She wore it fifty years ago down among our kin in old Sudbury, Mass. I kind o' smiled it out of her! After I had given her a cup of tea and had dressed her gray hair like the picture of Martha Custis when George came a-wooing, she said:

"Dear Mary Ann, how kind you are to aged people." I then pinned a rose on her bosom and she asked: "Have I auything, dear, that you'd like to have?" I snapped at that bait quicker than a trout, and soon was ripping up the Jerusha relic. The lace I bought at one dollar per yard was fairly good.

The best sort of a cool, handy dress for us, Jennie, is a half wool summer chailie. Four years ago I got one, and it was just the thing when the dog star raged and "when the grasshopper was a burden." Mine cost seventeen cents in Boston. I wore it two summers in a dress and two in a wrapper. I made the sewing girl line it with cheese-cloth, so it would

be thin. She objected, for fear it wouldn't fit. When the waist was worn out I sent the dress to Sister Caroline's children. It was washed and did not shrink a bit. They colored it in pale pink dye, and would you believe it, they wore it to the village commencement and looked like angels dropped down from the skies by accident. A neighbor's child said of it: "Oh, Bessie and Agnes Rodgers have new dresses the color of a summer cloud. I guess they must have cost a lot; may be, though, their Auntie Ricketts sent them from Baltimore." (No, she didn't.) India, China or pongee silks are cool, but all cannot afford them.

Careless women and girls often plump slightly soiled dresses into the tub when gasoline, benzine or something else would have removed the spots and saved the freshness.

#### KNITTED BED-SPREAD.

Cast on one st about six inches from the end of thread.

First row—O, k 1.

Second row—O, p 1, k 1.

Third row—O, k 1, 3 times.

Fourth row—O, k 1, p 3, k 2.

Fifth row—O, k 2, o, k 3, o, k 2.

Sixth row—O, k 2, p 5, k 3.

Seventh row—O, k 3, o, k 5, o, k 3.

Eighth row—O, k 3, p 7, k 4.

Ninth row—O, k 4, o, k 7, o, k 4.

Tenth row—O, k 4, p 9, k 5.

Eleventh row—O, k 19.

Twelfth row—O, k 5, p 9, k 6.

13th, 15th, 17th, 19th, 21st, 23d and 25th rows—Throw thread over and knit rest plain.

Fourteenth row—O, k 6, p 9, k 7.

Sixteenth row—O, k 7, p 9, k 8.

Eighteenth row—O, k 8, p 9, k 9.

Twentieth row—O, k 9, p 9, k 10.

Twenty-second row—O, k 10, p 9, k 11.

Twenty-fourth row—O, k 11, p 9, k 12.

Twenty-sixth row—O, k 12, p 9, k 13.

Twenty-seventh row—O, k 13, sl 1, k 1, pass sl st over the one knit, k 5, n, k 13.

Twenty-eighth row—O, k 13, p 7, k 14.

Twenty-ninth row—O, k 14, sl 1, k 1, pass the slip st over the one knit, k 3, n, k 14.

Thirtieth row—O, k 14, p 5, k 15.

Thirty-first row—O, k 15, sl 1, k 1, pass the sl st over the one knit, k 1, n, k 15.

Thirty-second row—O, k 15, p 3, k 16.

Thirty-third row—O, k 16, sl 1, n, pass sl st over the one narrowed, k 16.

Thirty-fourth row—O, k 34.

Thirty-fifth row—K 1, o, n, o, n. Repeat to the end.

Thirty-sixth row—P until only 2 st remain, p 2 together.

Thirty-seventh and thirty-eighth rows—K until only 2 st remain, n.

39th, 42d, 45th, 48th, 51st, 54th, 57th, 60th, 63rd and 66th rows—Knit like thirty-sixth.

40th, 41st, 43rd, 44th, 46th, 47th, 49th, 50th, 52d, 53rd, 55th, 56th, 58th, 59th, 61st, 62d, 64th, 65th and 67th row—Knit like thirty-seventh.

Sixty-eighth row—Sl 1, n, pass sl st over the one narrowed.

Break off the thread about six inches from the needle and draw it through the one on the needle. This completes one square. In joining them together sew them so that the leaves will form a star. Sew them with the threads left at each end. Four blocks will form one star.

Abbreviations—K, knit; n, narrow; p, purl; o, over; sl, slip; st, stitch.

ELLA McCOWEN.

#### SECURITY.

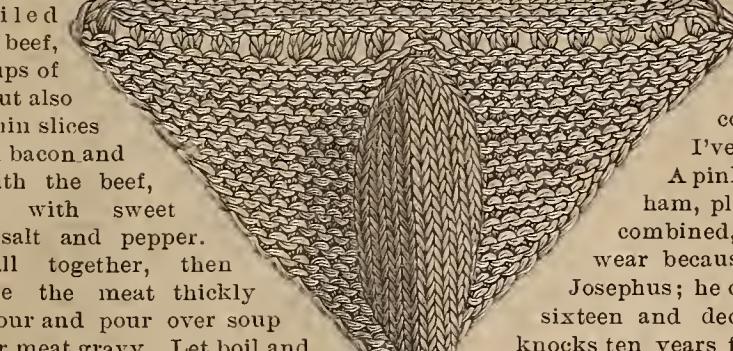
It is a great thing to have a bank account, to check out when you like. If you keep adding to it to balance the drain, all right; if not, you can see what will happen. It is precisely the same with your physical vigor. Suppose you have overdrawn, what then? "Collapse," you will say—not necessarily so. Observe:

Drs. Starkey & Paley—"When I am worn out with work, I use an inhalation of your Compound Oxygen Treatment, and find renewed strength and elasticity of spirits at once." ELLA R. TENNENT, Ed. "Tennent's Home Magazine," Marietta, Ga., Mar. 25, '87. Drs. Starkey & Paley—"When suffering from throat trouble a few years ago, I used your Compound Oxygen Treatment with good and lasting results." M. L. MORROW, Chester, Pa., Feb. 13, 1889. Drs. Starkey & Paley—"I used your Compound Oxygen Treatment and feel justified from benefits received to recommend it highly. I would especially recommend it to those suffering from debility, lung and throat trouble." REV. JOHN B. GREGORY, Pastor M. E. Church, Birmingham, Alabama, March 6, 1889.

Drs. Starkey & Paley—"I used your Compound Oxygen Treatment for an abscess of the lungs—it made me entirely well again." J. R. PENICK, Pembroke, Ky., June 25, 1889. Drs. Starkey & Paley—"Your Compound Oxygen Treatment has done much for me. My lungs are sound now." MRS. ELLA HARRINGTON, Nevada, Mo., July 28, 1889.

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## Our Sunday Afternoon.

## WHO BIDES HIS TIME.

Who hides his time and day by day  
Faces defeat full patiently,  
And lifts a mirthful roundelay,  
However poor his fortunes he—  
He will not fail in any qualm  
Of poverty. The paltry dime,  
It will grow golden in his palm  
Who hides his time.

Who hides his time—he tastes the sweet  
Of honey in the saltiest tear;  
And, though he fares with gloomiest feet,  
Joy runs to meet him drawing near.  
The birds are heralds of his cause,  
And, like a never-ending rhyme,  
The roadside blooms in his applause  
Who hides his time.

Who hides his time, and fevers not  
In the hot race that none achieves,  
Shall wear cool, wreathen laurel, wrought  
With crimson berries in the leaves;  
And he shall reign a goodly king,  
And sway his hand on every clime,  
With peace writ on his signet ring,  
Who hides his time.

## THE ECONOMICAL MILLIONAIRE.

HERE are a couple of millionaires at the Windsor Hotel. One of them is a director and the biggest stockholder in a big southern railroad. He is a bachelor, and his name, which I assure you is one of the very commonest in the world, begins with a capital S. Last winter he contracted with a little flower boy for a bunch of choice cut flowers to be sent to the daughter of a friend of his, a well-known banker, whose name begins with a K. When the boy came with the flowers and asked a reasonable price for them, the old skinflint dickered with him until it was too late for the boy to sell them elsewhere, and until he was only too glad to get rid of them at half price. The boy happened to be a favorite around the Windsor Hotel, and loud were the denunciations of the millionaire when it was discovered how shabbily he had treated the little fellow. I overheard one of the chambermaids, whose sympathies were aroused in favor of the lad, say: "What can you expect from a man who washes out his own socks and leaves them hanging in the basin to dry?" The best joke was, that the boy had to take the bouquet to the young lady's address, with the gentleman's card, but passing the Metropolitan Opera House on his way, he picked out the choicest of the flowers, sold them in the lobby of the opera house, recouped himself for his loss, and carried the diminished bouquet to the young lady in question.—*New York Truth*.

## IT IS CURIOUS WHO GIVE.

"It's curious who give. There's Squire Wood, he's put down two dollars; his farm's worth \$10,000, and he's money at interest. And there's Mrs. Brown, she's put down five dollars; and I don't believe she's had a new gown in two years, and her bonnet ain't none of the newest, and she's them three grandchildren to support since her son was killed in the army; and she's nothing but her pension to live on. Well, she'll have to scrimp on butter and tea for awhile, but she'll pay it. She just loves the cause; that's why she gives."

These were the utterances of Deacon Daniel, after we returned from church, the day pledges were taken for contributions to foreign missions. He read them off, and I took down the items to find the aggregate. He went on:

"There's Maria Hill, she's put down five dollars; she teaches in the North district, and don't have but twenty dollars a month, and pays her board; and she has to help support her mother. But when she told her experience, the time she joined the church, I knew the Lord had done a work in her soul; and where he works you'll generally see the fruit in giving. And there's John Baker, he's put down one dollar, and he'll chew more than that worth of tobacco in a fortnight. Cyrus Dunning, four dollars. Well, he'll have to do some extra painting with that crippled hand; but he'll do it, and sing the Lord's songs while he's at work."—*Missionary Messenger*.

## DON'T DISCOURAGE YOUR PEOPLE.

I have seen a preacher get sour and become worried and scold just because a meeting did not go to suit him, or because the audience was not just what it should be, or for some other trifling thing for which his members were in nowise to blame. They did not need scolding, they needed encouraging.

Do not scold your members, my brother, because people do not come to hear you preach. That is not their fault, but it may be yours. You are to be an example to the flock—an example in word and in deed. Then you should encourage them and help them, and be their leader. They look to you for encouragement and instruction in their Christian life. Do not, I pray, let them be disappointed. Show them that you mean what you say. Study to show yourself approved unto God, a workman that needeth not to be ashamed. There are too many in the world who are cross and bearish. What the world and the church need is more sunshine and joy. The way to impart sunshine to others is to be full of it ourselves. The way to discourage others is to be discouraged ourselves, and one way, and one of the best, to discourage members of the church, is for their pastor to scold whenever things do not go as he pleases.

## TURNED TO JOY.

We live in a sad world. Tears are everywhere. Suffering, trial, sundered ties, broken hearts, meet us on all sides. Men have called this world a vale of tears, a wailing-place, one great Bochim. Every land and city, almost every family, treasures sad memories. Earth has furnished no specific to heal these fountains of sorrow. Without some divine interposition men go on from bad to worse, piling up their griefs and accumulating wounds until the heart itself breaks down under the load. But "is there no balm in Gilead, no physician there?" Must this tide of sorrow ever move unchecked? Is there no healing branch to be cast into the bitter waters? Thanks be to God for the unspeakable gift of his Son, who brought life and immortality to light through his own resurrection, and opened the crimson "fountain in the house of David for sin and uncleanness." The believer knows sorrow, but at the touch of Christ his sorrow is turned into joy. A light clear and strong shines into the tomb itself, and a soul ascends to heaven from the place of bitterness and death; for even these afflictions shall "work out a far more exceeding and eternal weight of glory."—*Zion's Herald*.

## REPUTATION.

Beauty of reputation is a mantle of spotless ermine, in which if you are enwrapped you shall receive the homage of those about you, as real, as ready and as spontaneous as any ever paid to personal beauty in its most entrancing hour. Some kind of reputation you must have, whether you will or not. In school, in church, at home, and in society you carry ever with you the wings of a good, or the ball and chain of a bad reputation. Resolve to make it beautiful, clear, shining, gracious. This is within your power, though the color of your eyes and hair is not. But reputation, after all, is but the shadow cast by character, and beauty in its best and highest sense commands all forces worth the having in all worlds. Every form of attractiveness confesses the primacy of this. Beauty of character includes every good of which the human heart can know, and makes the woman who possesses it a princess in Israel, whose home is everybody's heart.

## SHORT OF A MAN.

"We were short of a man," said a live pastor lately, in a public address, "and we just prayed that the Lord would send him. He had declared that he would not withhold from us any good thing. We had not the shadow of a doubt that the thing we wanted was a downright good thing. It was a Sunday-school superintendent, of which we were in extremest need. We went to the Lord for him, and he sent him, in the person of a live Americanized and Christianized Irishman, who is precisely the man to fill the place." Let suffering Sunday-schools learn a lesson, and churches also that have vacant pulpits.



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## Our Miscellany.

## AFTER.

After the shower, the truquill sun;  
After the snow, the emerald leaves;  
Silver stars when the day is done;  
After the harvest, golden sheaves.

After the clouds, the violet sky;  
After the tempest, the lull of waves;  
Quiet woods when the winds go by;  
After the battle, peaceful graves.

After the knell, the weddng bells;  
After the bird, the radiant rose;  
Joyful greetngs from sad farewells;  
After our weeping, sweet repose.

After the burden, the blissful meed;  
After the flight, the downy nest;  
After the furrow, the wakng seed;  
After the shadowy river—rest!

THE height of the atmosphere is almost forty milles.

OVER one million persons are employed by the railroads of the United States.

WHEN a man forgets himself he usually does something that makes others remember him.—*Atchison Globe*.

THE first public performance on a piano-forte was in the Covent Garden Theatre, London, May 16, 1767.

ONCE in a while people go around the world, but most of us are content to go through it.—*Binghamton Leader*.

THERE are more magazines and newspapers published in the United States than in all the rest of the world combined.

IT seems quite natural that the threads of conversation should sometimes produce a long yarn.—*Binghamton Republican*.

THE thoughtful cook puts granulated sugar on the berries when she hasn't time to wash the sand off them.—*Ashland Press*.

THERE are many shifts and changes, but if we stand still and bide our time the current which was this way to-day will set in an opposite direction to-morrow, and if it should not do so, what is that to us?—*Spurgeon*.

GIVE not thy tongue too great liberty lest it take thee prisoner. A word unspoken is, like the sword in the scabbard, thine. If vented, thy sword is in another's hand. If thou desire to be held wise, be so wise as to hold thy tongue.—*Quarles*.

## WHAT A MAGAZINE COSTS.

"Few readers of American magazines," said a prominent publisher the other day, "know what it costs to produce even a single issue of one of the great monthly periodicals which now stand at the head of publications of their class, the world over. The illustrations for the *Century* and *Harper's Magazine* cost on an average about \$5,000 per month, but with these two established magazines, the cost is diminishing rather than increasing, as both are using the 'process engraving' more and more. With *Scribner's*, on the other hand, large sums of money are being expended upon the engravings, as this young periodical seems determined to equal its older contemporaries at no matter what cost.

"A careful estimate of the money spent in illustrating the Christmas numbers of *Harper's* and *Scribner's*, put the sum at \$7,000 each, as both magazines contain about seventy pictures, the average being about \$100 for an engraving. Many of the full-page 'blocks' cost \$300 each, and some of the half-page illustrations, which readers often pass by unnoticed,

cost from \$200 to \$250 each. These prices are easily accounted for when it is remembered that men like J. Allen Weir, Elihu Nedder, Will H. Low, A. B. Frost, receive from \$100 to \$150 a drawing. Ten years ago, the highest price paid for the same work was \$50 a drawing for a full-page illustration.

"To come to the literary matter; the expense for articles and stories, a large proportion of which are prepared to order, cost on an average about \$25 a printed page, and I have known \$100 a page to be demanded. The 'fixed charges' on the large magazines for literary and artistic matter alone is, therefore, from \$8,000 to \$10,000 a month, enough to eat up the profits on one hundred thousand copies. The publishing of a magazine, I tell you, is not what it is cracked up to be."—*New England Homestead*.

## EAT BEFORE GOING TO BED.

Most students and women who are troubled with insomnia are dyspeptic, and they should, therefore, eat before going to bed, having put aside work entirely at least an hour before. If they are not hungry, they should simply be instructed to eat, and if they are hungry, they should eat whatever they want. A glass of milk and a biscuit is sometimes all that can be taken at first, or mashed potato buttered. If possible, the night meal should be taken in another room than the sleeping apartment, and for men in the city it will be found advantageous to go out to a restaurant. Before eating, however, a bath should be taken, preferably cold or cool, which should be given with a sponge or stiff brush, and the body thoroughly rubbed off with a coarse towel afterward. The bath need not be more than five minutes in duration. Further than this, the patient should go to bed at the same hour every night and arise at the same hour every morning. There is a popular superstition that grown people should not eat immediately before going to sleep; that it will give them indigestion, nightmare or both. The writer cannot see why adults should be so very different in this respect from babies. The average person should be in bed seven or eight hours, which is time enough for the digestion of almost anything edible. In our American life, he thinks, the digestion carried on through sleep probably has the better chance for thoroughness.—*Journal of the American Medical Association*.

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## Smiles.

## DR. WATTS IMPROVED.

Now doth the little busy fly  
Improve each shining hour,  
And when we are drowsy in the morning, and the little torment crawls over our neck and buzzes around our left ear, and flies glibly away every time we slap, and dodges around the room awhile, and then settles down again on our nose, just as we are getting back to sleep, and starts in to investigate our most ticklish nostril, oh! wouldn't we knock that pestiferous little insect sky-high!

If we only had the power!

—Somerville Journal.

## HE FOUND THE SCHOOLMASTER.



WE WERE sitting on the veranda of a hotel at Niagara Falls, when I noticed the man on my right looking sharply at the man on my left, and presently he got up in an excited way and walked about. After a bit he halted before the other man and asked:

"Isn't your name Graham?"  
"Yes, sir," was the prompt reply.  
"Didn't you used to teach school at Elmira?"  
"Yes, sir."  
"In 1863?"  
"Yes, sir."  
"Do you remember a boy named Godkin?"  
"Very distinctly, sir."  
"Do you remember that he put a package of firecrackers under his desk and touched them off?"

"As if it happened only yesterday."  
"And you basted him for it?"  
"I did. I licked him until he could hardly stand, and I've always been glad of it?"  
"You have, eh?" said the other, breathing fast and hard. "Do you know that that boy swore a terrible oath?"

"I presume he did, as he was a thorough young villain."

"He swore an oath that he would grow up and hunt for you and pound you within an inch of your life."

"But I haven't heard from him yet."

"You hear from him now! He stands before you! I am that boy!"

"Well?"

"Prepare to be licked! My time has come at last!"

He made a dive for the old pedagogue, but the latter evaded him, made a half-turn and hit him on the jaw, and Godkin went over a chair in a heap. Then the whilom schoolmaster piled onto him, and licked him until he cried "Enough," and it didn't take him over three minutes to do it. Then he retired to get on another collar and replace some buttons, and I helped Godkin up and observed:

"You didn't wait quite long enough, I guess."  
"Say! That's where I made a misce!" he replied. "I see now that I ought to have held off until he had got to be about 150 years old. The old devil is all of 70 now, but he licked me right off the reel, and I'll never have the sand to stand up to him again. Here's thirty years of waiting for vengeance knocked into a cocked hat in three minutes!"

## TIMES HAD CHANGED.

At Sumpter, S. C., there was a large crowd of colored people at the depot as the train pulled in. An old, bald-headed Uncle Jerry had his head out of the coach set apart for colored passengers, and a man on the platform recognized him and called out:

"Hello, Misser Stivers, is dat yo'?"

The old man looked straight at him, but made no response.

"Hello, Misser Stivers!"

No response.

"Say, Misser Stivers, has yo' losted yo' bearing?" persisted the man, as he drew nearer.

"Boy, was yo' talkin to me?" sternly demanded the old man.

"Sartin. What's de matter?"

"Boy, does yo' want anything of me?"

"Wby, how yo' talk! Reckon yo' has got de hoodoo."

"Does yo' evidently reckon yo' knows me?"

"Of course I knows yo'. Yo' is old man Stivers."

"When did yo' know me?"

"Last fall. Why, I dun worked wid yo' fur three months."

"An' when yo' dun worked wid me what was I a-doin'?"

"Drivin' dem mules for Kurnel Johnson."

"Exactly, sah. But I want yo' to understand dat dere is a beap o' difference atwixt drivin' dem mewls fur Kurnel Johnson an' ridin' on de kivered kyars along wid white folks. I might a-knowned yo' last fall, sah, but if yo' now deslaah to permeate any elongated conver-sashun wid me yo' mus' git some 'sponsible gem'len to introduce yo'!"

## THEY WERE MOSTLY "BAPTISSES."

When the western troops first entered that peculiar region north-east of Cumberland Gap, they found in the scanty population many a family so isolated that it had seen no neighbors for months, and had even "lost the run of the days of the week." A very curious fact (and it is a fact duly vouched for) was that in some narrow valleys the few families had guessed that something unusual was going on, because they had seen no strange hunters or tourists for a long time, but did not know of the war. An officer in the first cavalry company to penetrate that region, relates that after a long ride over rocks and through forests, his company came to a tolerably well-built house in a circular hollow, where there were perhaps five acres of arable land. An old woman rushed out, and catching sight of the uniforms, exclaimed:

"Laws a massy me! ef h'yar ain't one o' Genral Jackson's men. Wby, mister, I 'lowed all his men was dead years and years ago."

"And so they are, ma'am."

"An' who be youuns?"

"Union soldiers, ma'am—fighting for Old Abe, as your folks say."

"Old Abe! Who's he?"

"Wby, Abraham Lincoln, president of the United States."

"Lawd sakes! An' what's youuns h'yar fur? To fight? Is the British cum in ag'in?"

This brought an explanation and account of the war, at which the old woman was paralyzed with astonishment. And then followed this colloquy:

"Ma'am, are you Union?"

"Naw."

"Are you secesh?"

"Naw."

"Well, what are you, then?"

"Well, I hain't never jined nothin' yet, but most of the folks around h'yar is Baptisses, and so me and my old man sort o' leans that way."

## ONE SWINDLE EXPLAINED.

A drummer who travels for a Boston grocery concern says that he sees in Maine some of the sharpest tricks that are practiced on his route. He gives the following specimen:

A farmer's wife hustled into a store in Washington county the other day, and went for the proprietor with:

"Mr. E.—, I bought six pounds of sugar here last week, and when I got it home I found a stone weighing two pounds in the package."

"Yes, ma'am."

"Can you explain the swindle, sir?"

"I think I can," was the proprietor's placid reply. "When I weighed your eight pounds of butter, week before last, I found a two-pound pebble in the jar, and when I weighed your sugar the stone must have slipped into the scales, somehow. We are both growing old, ma'am, and I am sorry to say that our eyesight isn't to be trusted. What can I do for you today, ma'am?"

For a moment the woman gazed at the tradesman over her brass-bound spectacles. Then she recollected herself and remarked that she had a dozen eggs which she wished to exchange for hooks and eyes.—Lewiston Journal.

## OF COURSE.

"Look at our fashionable young women," said a dress-reform lecturer; "they toil not, neither do they spin, and yet Solomon in all his glory was not arrayed like one of these." Well, we should hope not. Solomon would have looked pretty going about in a tight-fitting redingote made of checker cloth, trimmed with bands of velvet, and a hat partly on his head, with the broad brim crushed and dented as if he had been "out with the boys." He would have been put into an insane asylum.—Yorristown Herald.

## HE PRAYED WITH FERVOR.

Sister Lizzie was to be married in a few months and she was putting in the interval of leisure from preparing for the ceremony in the way of dress by experimenting on her family in the cooking line.

Little John was going to bed, and went through his usual prayers up to the point of saying, "Give us this day our daily bread," when some depressing memory struck him, and he added:

"But don't let our Lizzie bake it."—Washington Post.

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MISSOURI.—(Columbia) Bulletin No. 11, May, 1890. Texas fever.

NEVADA.—(Reno) Bulletin No. 9, May 1, 1890. A serious rose pest.

NEW JERSEY.—(New Brunswick) April 30, 1890. Experiments with different breeds of dairy cows.

NEW YORK.—(Cornell Station, Ithaca) Bulletin No. 17, May, 1890. A description of Cochran's method for the determination of fat in milk, for the use of dairymen.

NORTH CAROLINA.—(Raleigh) Annual Report for 1889. Bulletin No. 70, April 15, 1890. The weed pests of the farm. Japan clover.

PENNSYLVANIA.—(State College P. O.) Bulletin No. 11, April, 1890. Indian corn as a grain and forage crop.

TENNESSEE.—(Knoxville) Special Bulletin C, May 10, 1890. Treatment of certain fungus diseases of plants.

VERMONT.—(Burlington) Bulletin No. 20, May, 1890. Analyses of fertilizers licensed for sale in the state of Vermont for the year 1890. Bulletin No. 19, April, 1890. Questions concerning insects.

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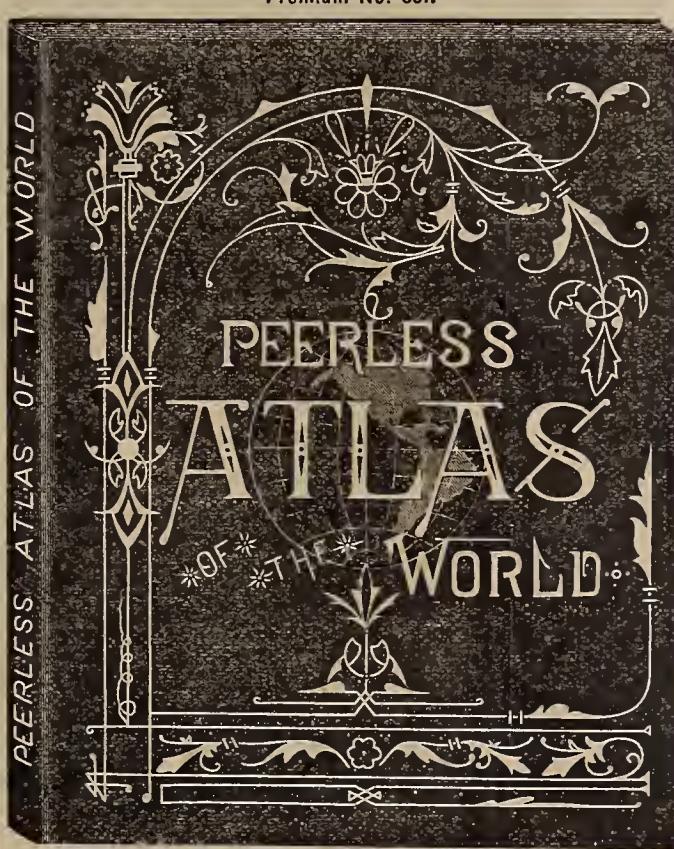
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" Dairy.	10 @ 11	9 @ 15	12
Common.	4 @ 6	4 @ 5	6 @ 10
GRAIN.			
Wheat No. 2 spr'g	85 1/4	90	
" No. 2w'ut'r	85 1/4	93	
Corn.	32 @ 34 1/2	40 1/2 @ 41 1/2	47
Oats.	28 @ 31 1/2	33 @ 34 1/2	33
LIVE STOCK.			
Cattle, Extra.	4 90 @ 5 00	4 30 @ 5 20	
" Shippers.	3 63 @ 4 85	4 45 @ 4 60	2 00 @ 3 75
" Stockers.	2 40 @ 4 00		
Hogs.	3 50 @ 3 75	3 50 @ 4 30	3 25 @ 4 50
Sheep, com. to good	3 75 @ 5 15	4 25 @ 6 00	2 50 @ 3 25
" Lambs.	5 00 @ 6 70	5 50 @ 7 75	
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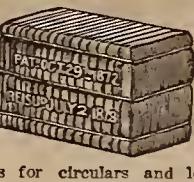
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VOL. XIII. NO. 21.

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of any Agricultural Journal in the World.

## Current Comment.

THE House of Representatives passed  
one silver bill and the Senate an-  
other, the main features of both of  
which have been given in these columns.  
Since then a conference committee has  
presented a substitute for these bills,  
which has passed both branches of  
congress and been signed by the president.  
The new law is a compromise measure,  
but it is probably the best that could have  
been made under the circumstances, the  
differences of opinion on the subject of  
silver legislation being very great. The  
bill was passed by a party vote. What  
was and should have been kept a plain  
business question became a political one,  
a usual thing in congress. The new law  
reads as follows:

The secretary of the treasury is hereby  
directed to purchase from time to time silver  
bullion to the aggregate amount of 4,500,000  
ounces, or so much thereof as may be offered  
in each month, at the market price thereof,  
not exceeding one dollar for 371 25-100 grains  
of pure silver, and to issue in payment for such  
purchases of silver bullion treasury notes of  
the United States, to be prepared by the sec-  
retary of the treasury in such form and of  
such denominations, not less than \$1 nor  
more than \$1,000, as he may prescribe, and a  
sum sufficient to carry into effect the pro-  
visions of this act is hereby appropriated out  
of any money in the treasury not otherwise  
appropriated.

SECTION 2. That the treasury notes issued in  
accordance with the provisions of this act  
shall be redeemable on demand, in coin, at the  
treasury of the United States, or at the office  
of any assistant treasurer of the United States,  
and when so redeemed may be reissued, but  
no greater or less amount of such notes shall  
be outstanding at any time than the cost of the  
silver bullion and the standard silver dollars  
coined therefrom then held in the treasury  
purchased by such notes; and such treasury  
notes shall be a legal tender in payment of all  
debts, public and private, except where other-  
wise expressly stipulated in the contract, and  
shall be receivable for customs, taxes and all  
public dues, and when so received may be re-  
issued; and such notes when held by any  
national banking association may be counted  
as a part of its lawful reserve. That upon  
demand of the holder of any of the treasury  
notes herein provided for, the secretary of the  
treasury shall, under such regulations as he  
may prescribe, redeem such notes in gold or  
silver coin, at his discretion, it being the  
established policy of the United States to  
maintain the two metals on a parity with each  
other upon the present legal ratio, or such  
ratio as may be provided by law.

SEC. 3. That the secretary of the treasury  
shall each month coin two million ounces of  
the silver bullion purchased under the pro-  
visions of this act into standard silver dollars  
until the first day of July, 1891, and after that  
time he shall coin of the silver bullion pur-  
chased under the provisions of this act as

much as may be necessary to provide for the  
redemption of the treasury notes herein pro-  
vided for, and any gain or seigniorage arising  
from such coinage shall be accounted for and  
paid into the treasury.

SEC. 4. That the silver bullion purchased  
under the provisions of this act shall be sub-  
ject to the requirements of existing law and  
the regulations of the mint service governing  
the methods of determining the amount of  
pure silver contained and the amount of  
charges or deductions, if any, to be made.

SEC. 5. That so much of the act of February  
28, 1878, entitled "An act to authorize the coinage  
of the standard silver dollar and to restore  
its legal tender character," as requires the  
monthly purchase and coinage of the same  
into silver dollars of not less than two million  
dollars nor more than four million dollars,  
worth of silver is hereby repealed.

SEC. 6. That upon the passage of this act, the  
balances standing with the treasurer of the  
United States to the respective credits of  
national banks for deposits made to redeem  
the circulating notes of such banks, and all  
deposits thereafter received for like purpose,  
shall be covered into the treasury as a mis-  
cellaneous receipt, and the treasurer of the  
United States shall redeem from the general  
cash in the treasury the circulating notes of  
said banks which may come into his posses-  
sion subject to redemption; and, upon the  
certificate of the comptroller of the currency,  
that such notes have been received by him,  
and that they have been destroyed and that  
no new notes will be issued in their place,  
reimbursement of their amount shall be made  
to the treasurer under such regulations as the  
secretary of the treasury may prescribe, from  
an appropriation hereby created, to be known  
as "National bank notes, redemption ac-  
count," but the provisions of this act shall not  
apply to the deposits received under section 3  
of the act of June 20, 1874, requiring every  
national bank to keep in lawful money with  
the treasurer of the United States a sum equal  
to five per centum of its circulation, to be  
held and used for the redemption of its circu-  
lating notes, and the balance remaining of the  
deposits so covered shall, at the close of each  
month, be reported on the monthly public  
debt statement as debt of the United States  
bearing no interest.

SEC. 7. That this act shall take effect thirty  
days from and after its passage.

The final effects of this legislation can-  
not be predicted; it seems certain that it  
will increase the money of the country,  
and by furnishing a market for all the  
silver produced from our mines advance  
its price. The people want more money  
in circulation, and this law will give it to  
them. The silver purchased by the govern-  
ment under the provisions of this law  
will be represented in circulation by treasury  
notes issued in payment for bullion.

These notes being legal tender and re-  
deemable in either gold or silver coin, will  
make a new kind of paper money, as they  
will differ from greenbacks, silver certi-  
ficates, gold certificates and from national  
bank notes.

The most significant feature of this law  
is the statement in section two that it is  
the established policy of the United States  
to maintain the two metals on a parity  
with each other upon the present legal  
ratio, or such ratio as may be provided by  
law. It being the determined policy of  
this country to use both gold and silver  
as full legal tender money, the next im-  
portant action on the silver question is  
to get all nations using the double stand-  
ard to adopt a common ratio between  
gold and silver. A joint resolution has  
already been introduced in congress,

authorizing the president to invite the  
governments of other countries to join  
the United States in a conference to  
adopt a common ratio between gold and  
silver for the purpose of establishing inter-  
nationally the use of bimetallic money  
and securing fixity of relative value be-  
tween these two metals. This is the final  
solution of the question.

**A**NOTHER money matter of importance  
is now before the public. The pres-  
ident has sent to congress, with his  
endorsement, the following report on the  
subject of an international American  
monetary union adopted by the Pan  
American congress:

The International American Conference is  
of opinion that great advantages would accrue  
to the commerce between the nations of this  
continent by the use of a coin or coins that  
would be current at the same value in all the  
countries represented in this conference, and  
therefore recommends:

1. That an international American monetary union be established.
2. That as a basis for this union, an international coin or coins be issued, which shall be uniform in weight and fineness, and which may be used in all the countries represented in this conference.
3. That to give full effect to this recom-  
mendation, there shall meet in Washington a  
commission composed of one delegate or more  
from each nation represented in this confer-  
ence, which shall consider the quantity, the  
kind of currency, the uses it shall have, and  
the value and proportion of the international  
silver coin or coins, and their relation to  
gold.
4. That the government of the United  
States shall invite the commission to meet in  
Washington within a year, to be convened from  
the date of the adjournment of this confer-  
ence.

**P**HIS summer will be a notable one for  
the number of conventions held by  
farmers in various parts of the country,  
for the purpose of deciding on their  
course of political action in the fall elec-  
tions. The movement is one of political  
independence, and is rapidly growing all  
over the country, but it has progressed  
most in the West and South. In some  
states a full ticket of county, state and  
congressional candidates will be placed  
in the field and voted for. In other states  
they have adopted what seems to us to be  
the wiser course. They will first endeavor  
to secure the nomination by the old par-  
ties of suitable candidates pledged to  
their interests, and then support them  
regardless of party lines. Failing in this,  
they will put their own ticket in the field.  
The Farmers' Alliance is at the head of  
this movement. Many blunders will be  
made, but the general results will be very  
good. By organizing and asserting their  
political independence, farmers can and  
will secure their just demands.

**A**LAST April the general assembly of  
Ohio passed an act to provide for the  
organization and support of farmers'  
institute societies. It is necessary for ex-  
isting institute associations to reorganize  
and proceed according to the new law if  
they wish to avail themselves of the state  
and county aid provided by it. The first  
step will be to get up a petition for the  
establishment of a farmers' institute soci-  
ety and send it to L. N. Bonham, secre-  
tary of the Ohio State Board of Agricul-  
ture, Columbus, Ohio. This should be

done not later than September 1st. On  
application, the secretary will furnish  
blank petitions and copies of the rules  
and law for the organization and manage-  
ment of these institutes. Let this matter  
be attended to at once. Get twenty or  
more residents of the county, of legal age,  
to sign the following petition, and send it  
to the secretary:

To THE OHIO STATE BOARD OF AGRICULTURE:  
The undersigned residents of \_\_\_\_\_  
county, Ohio, respectfully represent that  
we desire to organize a farmers' institute  
society, under the act of the general as-  
sembly of Ohio, passed April 26, 1890.

We believe the farmers generally desire  
such an organization, and will give their  
hearty support and influence in its suc-  
cessful management for the advancement  
of agriculture, horticulture, stock breed-  
ing and kindred interests. We therefore  
petition your honorable body for approval,  
that we may receive the full benefits  
authorized under the law.

The secretaries of the existing societies  
should attend to this preliminary work  
without delay. The new law will make  
it much easier for the organization of in-  
stitutes in counties where there have been  
none heretofore, as the expense will fall  
upon all and not upon the few enterpris-  
ing ones who undertake to get them up.  
Let us now have institutes in every  
county in the state.

**A** NEW turn has been given to the  
tariff discussion by the letter of Sec-  
retary Blaine on reciprocity. Re-  
ferring to the placing of sugar on the free  
list, he says that it would certainly be  
very extraordinary policy on the part of  
our government just at this time to open  
our market without charge or duty to the  
enormous crops of sugar raised in Cuba  
and Porto Rico, from which Spanish  
islands this country now gets half her  
supply. To give a free market to this  
immense product of Spanish plantations  
at the moment Spain is excluded by pro-  
hibitory duties the products of American  
farms would be a policy as unprecedented  
as it would be unwise. The point he  
makes is that in the revision of our tariff  
free sugar should be conditional on the  
removal of Spanish imposts on our flour,  
and other exports which are not produced  
in those islands. His suggestion is in  
accordance with the true policy of pro-  
tection, and we have the opportunity to  
secure reciprocity by making sugar free  
only when they admit our products free.  
By way of illustration, he gives the case  
of coffee. Since we repealed the duty on  
coffee, in 1872, we have imported the prod-  
ucts of Brazil to the extent of \$821,806,000,  
and have sold to her only \$156,135,000  
of our own products. The difference—  
\$664,671,000—we have paid in gold or its  
equivalent, and Brazil has expended this  
vast sum in the markets of Europe. It  
can be readily seen how different the re-  
sult would have been if, in return for the  
free admission of Brazilian coffee in our  
markets, we had exacted the free admis-  
sion of certain products of the United  
States in the Brazilian market. To repeat  
this error with sugar—to an amount three  
times as large as with coffee—will close all  
opportunity to establish reciprocity of  
trade with Latin-America.

## FARM AND FIRESIDE.

ISSUED 1st AND 15th OF EACH MONTH BY  
MAST, CROWELL & KIRKPATRICK.

THIS PAPER HAS BEEN ENTERED AT THE POST-OFFICE  
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Philadelphia, Pa., or Springfield, Ohio.

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### Our Farm.

#### DOINGS OF THE DEPARTMENT AND THE EXPERIMENT STATIONS.

BY JOSEPH (TUSCO) GREINER.

The office of Experiment Stations of the Department of Agriculture (W. O. Atwater, director, Washington, D. C.) has just sent out "Experiment Station Bulletin No. 5." This contains organization lists of the agricultural experiment stations and agricultural schools and colleges in the United States. The originators of new fruits, vegetables or cereals, inventors of improved tools and devices, etc., frequently desire to correspond with the leading stations, or all of them, and ask for their addresses. Others wish to apply to some of them for their bulletins and reports. To all people with such object in view, this Bulletin No. 5 will give the desired information. Write for copy to the director, whose name and address I have given.

The Minnesota Agricultural Experiment Station is fortunate in having such a live horticulturist as Prof. S. B. Green. The bulletins coming from there are always interesting, and No. 10 makes no exception. It reports experiments recently made to settle the question whether plowing the land is really of any advantage in onion culture, or not, and Prof. Green finds that mere harrowing with the disk harrow is sufficient preparation, and gives even a larger yield than deeper tillage. "The yield this year (1889)," he says, "has again demonstrated that the most and best onions can be raised on a compact seed bed." A favorite practice with me, for many years, has been to plow land for onions in autumn, top-dress it with fine compost, poultry manure, ashes and fertilizers in early spring, pulverize the surface with a narrow-toothed cultivator, following with smoothing harrow, and then plant. This tallies pretty well with Prof. Green's experience. In his conclusions he says: "It would probably be best to use the land two years without plowing, and then plow as soon as possible in the fall after gathering the crop. By plowing thus early the land would have an opportunity to become compacted by the fall and spring rains and snows."

Among new varieties of onions, Prof. Green mentions the White Barletta as a small, flat, pure white variety, which ripens very early, being well "capped" by August 6th, and evidently an excellent variety for pickling.

The Prizetaker is spoken of as a very large, globular onion, averaging, as grown at the station last year, three and one half to four and one half inches in diameter, it is very tender, and resembles the

Bermuda onion in color [?]. In strength it is about the same as Yellow Danvers. Many of them weigh one pound each, and some one and one half pounds. While it cannot take the place of such standard varieties as Yellow Danvers, or the better strains of the red kinds, yet for some markets it may pay to raise a small quantity, which will bring an extra price on account of their enormous size. It is a fairly good keeper, but of rather too loose a texture for a shipping onion." I am growing it on a larger scale this season, and will give my verdict later.

Early Red Danvers, from J. J. H. Gregory, is mentioned as a very early, solid, red onion, of good size. It is a good keeper and a heavy cropper. The station had well developed, solid bulbs of it by August 20th, from seed sown April 17th.

Round Yellow Danvers was found to be one of the best onions for marketing purposes, and to sustain its well-known reputation wherever grown in the northern states.

Prof. Green's cabbage trials have been of especial interest to me, for the reason that I have experimented somewhat on the same line, and have reached the same conclusions. Mr. Green believes that sowing seed in the hill to be the surest way to grow good crops during our dry summers. The following is his plan, as described in his own words:

"The land, after being well manured, plowed and harrowed, is marked out with a three-foot marker, each way. We aim to plow, mark out and sow the seed in the same day, so that we may have moist soil

strain of the same variety of which every plant produced a good head.

The same horticulturist reports good success in fighting the curculio on our native plums, by spraying the trees with London purple and water, mixed in the proportion of one spoonful of London purple to two gallons of water. This was applied at intervals of a week, for three weeks, beginning June 5th. The syringe used was such as is ordinarily used in a greenhouse or garden, and is a very simple affair. The results were very marked. The ripe fruit on the syringed trees was almost entirely free from blemishes, while the fruit from the untreated trees contained scarce a specimen but what was injured by the work of the curculio or the gouger; besides, they ripened much earlier, and were of inferior flavor and size. The foliage of the syringed trees was uninjured. Mr. Green thinks that even these native plums, which are often spoken of as curculio-proof, and consequently left to be gnawed into by curculio and gouger, can be as much improved by the proper use of insecticides as any of the varieties of the European species.

In an experiment made to ascertain at what precise depth potatoes should be planted for best yield, one row of tubers was planted on the surface and covered two inches; another in furrows three inches deep, and covered three inches; a third in furrows six inches deep, and covered six inches, and a fourth eight inches deep, and covered eight inches. The yield was the larger the deeper the seed was planted; but it required much labor to dig

in the fertilizers has dropped \$1.20. Potash has remained the same in price and amount. On the whole, therefore, these sixteen brands of fertilizers which constitute the great bulk of all the fertilizers sold in the state, have a valuation this year of \$1.84 less than last, when calculated on the same prices. But since the selling price in Vermont averages about twenty-five per cent above the valuation, it follows that this amount should be added to the difference in valuation to get the real difference in commercial value, and this gives \$2.30. That is, in order that the farmer may get the same return for his money, he should purchase his fertilizers for \$2.30 per ton cheaper than he did last year.

"There has been no fall in retail price corresponding to this decrease in quality. The decrease in price on these sixteen brands has been \$0.88. This means, then, that while the cost of the raw materials to the manufacturers has decreased, yet these manufacturers have so lowered the quality of their goods as to make the farmer pay about \$1.50 more per ton than last year for the same amount of plant food." And, I will add, it also means that while farmers have had to be satisfied with steadily decreasing returns for their labor and investments, the fertilizer men have become more greedy, and ask greater profits than ever on a business that we mistrust has always paid them only too well for the good of the fertilizer buyer and user.

### MANGERS FOR HORSE-STABLE.

I send you a plan of a rack for feeding horses, which we have had in use for over a year, and which has given good satisfaction both for feeding hay and grain. This rack is two and one half feet wide by ten feet long, and feeds four head of horses.

Fig. 1 shows a front view for two horses; the other two stand on the opposite side. It is in sections; each section combines a hay-rack on one side and a trough on the other side. Fig. 2 gives an end view of one section, showing the way the grain-spout comes into the trough, and the way the hay is put into the rack. This rack can be built by any person that can work with tools. The bottom of the rack should be three and one half feet from the stable floor. For the bottom, use two planks 2 by 14 inches, which leaves a 2-inch space through which to let the lining boards down. Use a 2 by 4 scantling to nail the upper ends to, and make the trough eight inches deep. Cut the boards the slant you want the trough to be, and let them run clear through to the other side to make the end of the trough on the other side. Make the grain-spout 7 by 7 inside, and cut it off even with the back of the rack, as shown in Fig. 2, dotted lines. Let the lower end of the spout stand out on the bottom of the trough to put a board in for the back of the trough, as shown in Fig. 2. Make tight partition between each section. For the rack, use two scaultings, 2 by 3, for top and bottom pieces. The rungs can be either iron or tough wood. Bore a hole through the partition for the top piece to run through, so you can pull the lower end out for cleaning the rack, and fasten the lower end with two pins.

These racks can be used to a good advantage in a barn fifty feet long, with a barn floor eighteen feet wide. Divide the stable in four parts, and feed down at each side of the barn floor.

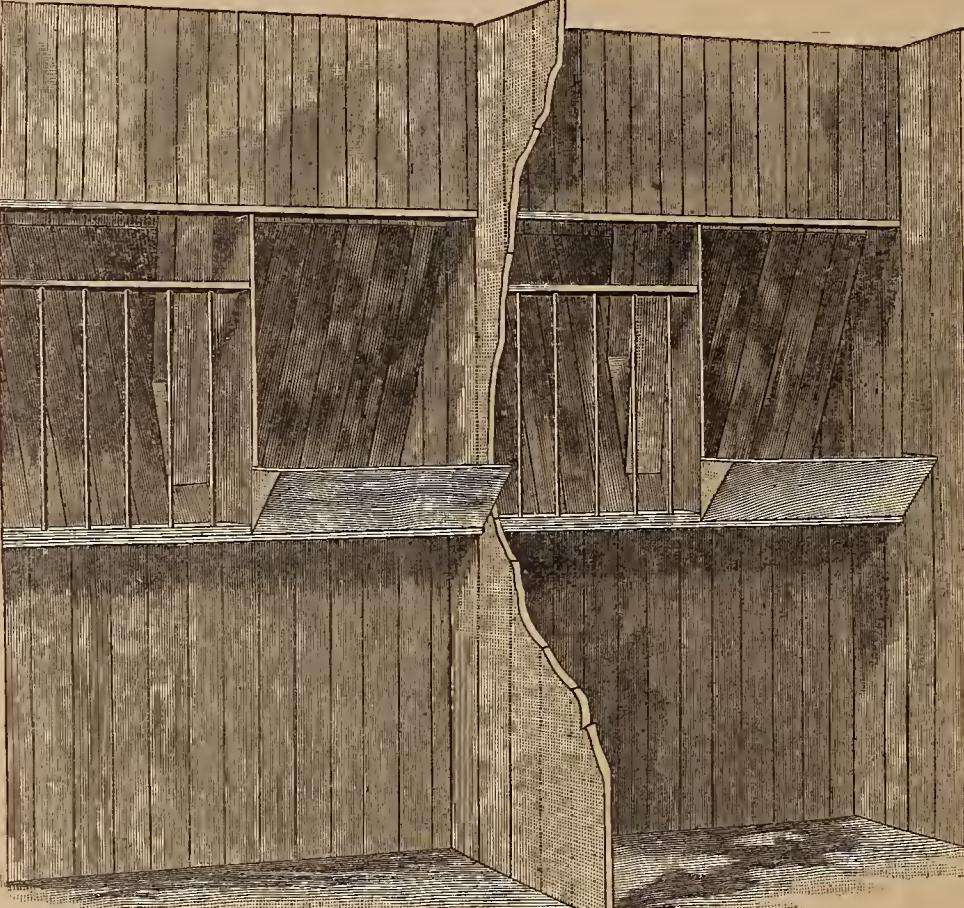
Pennsylvania. A. G. C. SHOEMAKER.

### NOTES ON BRITISH FARMING.

BY AN ENGLISHMAN.

When a Britisher is taken with a desire to do some tall talking, he is fond of saying that England is the Almighty's sample book, the model from which the rest of the earth was made. His American friends are apt to respond, on these occasions, by suggesting that he must credit the Almighty with having a pretty good magnifying glass. Then he collapses.

What the vainglorious Britisher alludes to is the orderly and very singular way in which all the various rocks and strata are laid out in their natural sequence from west to east in triangular England. We have along the west, right away to the north, all the primitive or igneous rocks, then the primary formations; next, the secondary, and farthest east, the tertiary



MANGERS FOR HORSE-STABLE.—FIG. 1.

with which to cover the seed. In sowing the seed we make a mark with the tip of a finger through any dry soil that may be on the surface at the intersection of the rows, and about seven or eight seeds are sown in the mark thus made, and covered with about half an inch of moist soil. We then step on the spot thus sown, with one foot, to compress the soil. As soon as the plants show themselves, we dust them frequently, when covered with dew, with land plaster or flour, to which one per cent of Paris green has been added. After the fourth leaf shows, the plants will be able to take care of themselves. When plants begin to crowd each other, they are all pulled up but one."

A trial made last season with transplanting plants at thinning time, in adjoining, equally well prepared land, and under conditions favorable to transplanting, resulted in a "uniformly poor crop, many of the heads not hardening at all," while the cabbage was very nice in the field where the seed was sown in the hill. Particular stress is also laid on the use of pedigree seed. Some of the strains of Flat Dutch cabbage tested at the station hardly produced 30 per cent of good heads, while in adjoining rows was a

row planted eight inches deep, and probably six inches is as deep as it is practical to economically plant and harvest a field of potatoes. The portion planted on the surface was very easy to dig, but the tubers were not as large as those planted deeper, owing, probably, to the dry season. In a wet season the results may possibly be reversed in such an experiment.

Bulletin No. 20, of the Vermont State Agricultural Experiment Station, gives a number of analyses of fertilizers for sale in the state for the year 1890. Especially interesting is the director's (W. W. Cooke) comparison of this year's values and prices with those of 1889. "From the tables given," says the bulletin, "it will be seen that the quality of the fertilizers sold has changed quite decidedly during the past year. Notwithstanding the fact that the price of materials furnishing nitrogen has decreased, so that the valuation has been lowered from nineteen cents a pound to seventeen cents, yet fertilizer manufacturers have decreased the amount of nitrogen in their goods by \$0.68 per ton. At the same time, though there has been no change in the price of materials containing phosphoric acid, the amount of it

and post-tertiary. The consequence of this arrangement is this: The eastern half of the country, comprising the secondary and tertiary formations, is the grain-growing portion of England, as it is called. The western half is more largely taken up with pasturage. The west winds bring abundant moisture from the Atlantic ocean, and this has procured for Ireland its appellation of the Emerald Isle, from the abundance of pasturage. Pasturage predominates, not to the entire exclusion of grain crops, but in cheese dairy districts, like Cheshire, two thirds of the land is in permanent pasture.

Farms in England vary, of course, in size, but there are comparatively few holdings of less than 100 acres. Six brothers in one family in Dorsetshire, connections of the writer, farm as much as 7,000 acres, but this is exceptional. In any case, the farmer has to be something of a capitalist. He has a good many temptations to withstand that are very apt, if he yields to them, to drag him under.

The chief ambition of the wealthy agriculturist is to be recognized as a gentleman farmer, who gives dinner parties and follows the hounds in scarlet, like the aristocracy. Usually, however, he is contented to follow the fox with a rig of top boots and a handsome hunting-whip.

#### THE LANDLORD.

Not one farmer in fifty owns his own land. The territorial magnates get all they can, and in many cases they are unwilling to recognize any hereditary succession in the families of their tenants. In Lincolnshire, however, as in the north of Ireland, tenant-right is recognized. This implies a right to be compensated for improvements. The landlord's chief occupation is game-preserving, and it is truly marvelous that this fertile subject for dispute does not cause more trouble than it does. One constantly sees cases in which more than half the farmer's crops have been consumed by the rabbits, and the right to destroy these, leaving the pheasants and hares to the landlord, is but a very partial protection. Compensation for such damage the farmer may get, but oftener he fails to get it.

The rent of land varies from \$1 up to \$20 an acre, \$5 or \$6 being about the average. Land is at an enormous premium in England. It is worth thirty years' purchase, or more, so that money so invested

yields barely 2½ per cent after deducting all charges. The possession of land confers such dignity that to be a land-owner is the universal ambition. A large land-owner is, as a matter of course, a justice of the peace, an honorary office that is greatly coveted in the country. In the great cities these J. P.'s are replaced by paid magistrates.

#### LABORERS.

The English farm laborer has no very enviable lot. His position is one that is unprogressive and not very susceptible of amelioration, though the organizations of trades unions, through the efforts of Arch and others, have at last begun to tell in his favor.

The common rate of wages for the best and most capable laborers is 10s or 11s a week—\$2.50 to \$2.75, with a cottage. He gets some extra pay during harvest, and has usually a good hit of a garden. If, however, he has a team to look after, he has little time to devote to his garden. Elderly or partly disabled men earn 5s to 7s only. Generally, the laborer is able to keep a pig. If his family is not too numerous, and the wife is a good manager and able to earn something, and if the cottage is one of the more picturesque sort, the condition of the farmer's man is not so very bad. The fact is, the misery of the agricultural portion is tempered by many alleviating circumstances that pull down the pride and independence of the race, making the poor man look up to the wealthy as they were of a different species; yet it contrasts favorably with the horrible existence of the very poor in the great cities of Europe.

#### CULTIVATORS IN THE OLDEN TIME.

To follow the various processes of emancipation by which farming has risen from being the occupation of serfs to what may now be called a scientific pursuit, is

to pass through as many circles, one above the other, as there are in Dante's Purgatory. In the first instance, all cultivators were serfs, without any exception. The villains, as they were called, little by little, were allowed to pay rent in money instead of performing servile labor or making over to the lords most of the produce. When leases began to be granted, in the fourteenth or fifteenth century, they were accorded in a high and mighty spirit by the lord, without allowing much option to the tenant as regards the discussion of the terms. In Fitz Herbert's book of husbandry, printed in 1534, there is still mention of serfs and bondmen. Another writer at about the same date divides the produce into tenths, of which three go for rent, seed and parson's tithe, respectively; four tenths for working expenses; another tenth "to fill belly day by day," another goes to the farmer's wife, and the last into the stocking.

Blythe's book in 1649 makes the first mention of alternating crops of clover and turnips with grain crops.

In these times of Farmers' Alliances, we may be interested in considering the hard names that were invented for cornerers in those days when cornering was a misdeemeanor. "He who shall make any motion for enhancing the price," says the law, "or who shall make any bargain for buying produce before the same is in the market, or shall dissuade any person from bringing his produce to market, shall be deemed a forestaller. Any person who buys and sells again in the same market, or within four miles, is called a regarter. Any person buying corn growing in the fields, or any other corn, with intent to sell again, shall be reputed an unlawful engrosser."

In 1681 we get the first mention of turnips being eaten by sheep, as follows: "Sheep fatten very well on turnips, which prove an excellent nourishment for them in hard winters when sodder is scarce; for they will not only eat the greens, but feed on the roots in the ground, and scoop them hollow, even to the very skin. Ten acres sown with turnips will feed as many sheep as one hundred acres thereof would before have done." And so in the various departments of agriculture there is gradual approximation to modern methods.

[Continued in our next issue.]

#### SUGAR CANE AGAIN.

My article on sugar cane, in the May 15th number of *FARM AND FIRESIDE*, seems to have been pretty widely read, judging from the number of letters I have received from various states, asking for more information on the subject. These letters are mostly from machinists or inventors, who are especially interested in the two closing sentences, which read:

"An effort is now being made by the Louisiana Sugar Planters' Association to get some inventor to bring out a machine cutter that can be operated with two mules, and that will cut ten acres per day as clean as if cut by hand. A premium of \$1,000 is offered for such a machine."

To those who inclosed stamps I answered their inquiries to the best of my ability. As some of the questions asked may be of general interest, I herewith reproduce them, with such answers as I am able to give.

A North Carolina farmer asks if I can send him a pint or so of sugar-cane seed. As sugar cane does not produce seed in the United States, my friend will have to send to Cuba or South America for it. North American sugar planters raise their cane by planting the stalks of cane. In general appearance, a stalk of sugar cane very much resembles a stalk of corn. The joints are from three to six inches apart, and there is an "eye," or germ, upon each joint. The entire stalk is planted lengthwise in a furrow made in a row about four feet wide, usually. A bunch, or "stool," of from three to eight stalks grows from each sound eye. The stalks are about one and one half inches thick and from five to seven feet in length. Twelve mature joints is a fair average yield, but on very rich bottom land, over thirty have been produced. I presume my North Carolina friend has an idea that sugar cane—*saccharum officinarum*—is a plant similar to sorghum.

An Indiana correspondent asks: (1.) "How far apart are the rows?"

The rows, or beds, are usually about four feet wide, and thrown up with a two-horse turning plow, the same as corn rows.

(2) "If drilled in the row, how far apart do the stalks stand?"

He evidently also labors under the mistake that sugar cane is raised from seed, like sorghum. So it is in the tropics, and it is probable that ere long sugar planters in the United States will plant cane seed from Cuba, instead of planting the stalk as is now done. Dr. W. C. Stubbs, director of the state experiment station, of Louisiana, some months since received from the government botanical gardens in the Barbadoes, a package of sugar-cane seed, which he planted by way of experiment. Should it be demonstrated that cane can be successfully grown from the tropical seed, a revolution in southern sugar planting may soon come about. It requires not less than twenty-five dollars' worth of cane (stalks) to plant an acre, besides the cost of putting up and handling the seed cane, which is a heavy and expensive job. The planting of a piece of ground in cane does not have to be done every year, however. When the cane is cut, the stubble is covered up, first with the cane fodder that is left upon the ground, and then with two furrows of earth thrown by a heavy, two-horse turn

Your fences. They may look all right at a distance, but when the grass gets short, the cows will examine them very carefully.

Your salt-box. The cows lick salt every day, and the lump disappears very rapidly while the cows are on grass. When you give them rock salt there is no danger of their getting too much.

The drinking places. Sometimes they get dry or very muddy. A cow suffering for water will not thrive.

Your drilled corn. Don't feed it until it tassels; that is, in any quantity. If you feed too heavily on immature corn, it will "scour" the cows.

Your dog. If he persists in running after the cows, kill him.

#### WAIT

Until late fall and winter before you breed your cows; then they will come in at the same time with good prices for dairy products.

Until you have tried the best methods before you are sure that dairying won't pay.

Until you have counted a hundred before you strike a cow.

Until the cow has eaten the afterbirth before you go into the stable to see whether the calf is a male or female; that is, if you are one of the wise ones who think the cow should not be allowed to eat the afterbirth.

Until you have given the question of building a silo serious thought before you decide against it.

Until you know what is the matter with your cow before you give her any medicine.

Until you see the "horn flies" boring into the cows' horns or skulls to lay their eggs before you believe such a silly story.

#### THINK

Over the reasons why your butter does not bring the highest price; it may be because it is not good butter.

About the different methods of setting milk; perhaps the old-fashioned way is not the best.

On the subject of washing butter; whether you can better get the buttermilk out while the butter is in small grains or when it is in large lumps.

Whether it will or not pay you to salt the butter with brine instead of salt.

About the yield of butter per cow, and whether your cows average as much as they ought to.

As to whose fault it is that your dairy doesn't pay; yours or the cows', or both.

Whether bars in the pasture fence will pay, in the long run, as well as a good gate.

#### CALCULATE

The difference in income between a special and a general purpose cow.

The cost of feeding a big cow for the sake of the beef when you are done milking her.

The expense of milking and storing the extra quantity of milk a milk breed gives when you are running a butter dairy.

Whether it will not pay you to find private customers for your butter, instead of selling it at the grocery store.

How much better it is to raise your own cows than to buy them. Save the heifer calves from your best cows, and keep them gentle by gentle treatment, so that they won't have to be "broken" when they become cows.

The profit you make from feeding skimmed milk to the pigs, and then try feeding it to the hens; then you can see where it will pay to feed it better—for pork or eggs.

The difference in the expense of feeding a good cow and a poor one; then find out the difference in the income.

To save your best clover hay for your cows, and make a liberal calculation of the quantity they will require.

That the pasture is liable to get short, and you ought to have a soiling crop ready for the emergency.

That it is your duty to tell the readers of this paper about anything useful you have found out from your own experience.

A. L. CROSBY.

FIG. 2.

plow. From two to three good crops can usually be grown from the stubble, when another planting must be done.

(3) "What is the appearance of a crop of cane?"

Very much that of a field of corn before it tassels out, but of a richer green color.

(4) "Is topping required?"

No.

(5) Does some of the cane get blown down, or leaning?"

Yes, quite often it leans over, but seldom falls flat.

The above questions pretty well cover the ground, I believe, and the answers will doubtless enable any one to form a fair idea of what a machine cane-cutter would have to overcome in order to be successful.

In conclusion, I wish to remark that as I am in no way interested in the proposed cane-cutter, parties wishing further information are advised to address Mr. A. Bouchereau, 61 Camp street, New Orleans.

DICK NAYLOR.

#### HINTS FOR THE FARM.

##### WATCH

Your cows. At the first appearance of anything being wrong with their health, find out the cause, if you can, and remove it.

Your calves. They don't need anything but milk, middlings and grass, but too much of the first two may cause trouble,

**That  
Tired Feeling  
So Overpowering  
So Discouraging  
Is Overcome by  
Hood's  
Sarsaparilla**

## Our Farm.

## GARDEN, FIELD AND FRUIT NOTES.

BY JOSEPH.

**S**UMMER TREATMENT OF ASPARAGUS BEDS.—A subscriber of Waukegan, Ills., inquires how late in the season asparagus can be cut for use without damage to the plantation. To this I have to say that severe cutting is at best an unnatural and violent treatment, which must necessarily hurt the plant's vitality. If we cease to cut early, we merely do a little less injury than if we cut a while longer. Our own natural appetite is usually the best safeguard against too severe and prolonged cutting. Some injury has to be done anyway, if we desire to enjoy the vegetable. We cannot very well eat the cake and keep it, too. It is simply nonsense to talk against raising large crops for fear that such crops exhaust the soil fertility; so it would be folly to be afraid of eating asparagus because cutting hurts the plants. All people, however, like frequent changes in their diet, and especially such changes as the season affords naturally. When green peas come in, we usually prefer them to the asparagus, which has then been a daily dish for five or six weeks. So, after June the asparagus bed is ordinarily safe from further molestation; and it has been accepted as a rule to stop cutting when peas are fit for use. Left to themselves, the stalks grow up quickly under the influence of the warm season, and soon provide a dense shade for the ground, which suppresses all weed growth and keeps the soil moist and mellow. Consequently, no more attention will be needed until the top growth has fulfilled its mission, which is to feed and strengthen the roots. Then the stalks can be cut and removed, and should be, before the ripe seed drops to the ground and starts a lot of young plants all over the bed—a nuisance perhaps worse than weeds.

Liberal feeding with good compost, wood ashes, complete commercial fertilizer, etc., applied in fall, winter or early spring, will help to repair the damage done to the plants by cutting the sprouts, and give them vigor enough to endure a repetition of the rough treatment another season.

I cannot tell too often, however, that the great secret in growing fine "grass" is giving each plant plenty of room. I prefer to have the distance between the rows not less than five feet, and between the plants in the rows not less than two feet. Each plant will then have space enough for full development, and for the production of large, succulent shoots. This point of space is really of greater importance, even, than fertile soil or liberal manuring. Crowding asparagus plants will not do.

**SOME FINE STRAWBERRIES.**—It is really surprising how little impression all the choice and wonderful new strawberries are making on our women folks. "Give us the Wilson," is yet their cry. Complaints of "cores" in the new sorts, and of "minshiness," etc., have frequently sounded in my ears, when the "choice," new berries were brought in. In short, there can be no denying the fact that the old Wilson has yet a strong hold on the affections of the average cook, and that for this reason it also remains a favorite in market. The newer wonders have all their merits told when launched out on their journey to supposed popularity, while their faults are only gradually coming to light, but never fail to show up in the end.

The most promising of the recent introductions, at present, are Warfield (No. 2) and Haverland. I would not hesitate a minute to plant them, even on a large scale, for profit. Such a mass of fruit as found under the large, healthy foliage of Haverland, wherever I have seen it this year and last, I have seldom seen; and the fruit holds out well to the end of the season, much longer and better than Wilson. With a not overfastidious and not too distant market, the grower can make money with this variety. The fruit is rather light colored, oblong, regular, and quite uniform in size; not any too

firm nor too good in flavor. My impression is that it lacks character in the latter respect. But it gives fruit, and plenty of it, and may be planted with entire confidence.

The Warfield is another berry that will prove profitable to the commercial grower. Its fruit also holds out well to the end of the season, and is larger than Wilson, with better and healthier foliage. The much-lauded Jessie has large, thrifty foliage and a large berry of good flavor, but so creased and irregular that I would not recommend it for market. Neither does it give anything like the amount of fruit produced by Haverland or Warfield. The Long John, John Burdett's berry, which originated in this town, and of which some of the readers may have heard, equals the Haverland in productiveness, while in health and foliage it seems to surpass any strawberry now in cultivation. The color of fruit is good, quite dark, berry large under fair treatment, and reasonably firm. It is a pity that this berry had not been properly introduced, for it might have taken a prominent place.

**ANNALS OF HORTICULTURE.**—A book under the title, "Annals of Horticulture in North America, for the year 1889," has just been published by the Rural Publishing Company, of New York City. It is written or compiled by Prof. L. H. Bailey, of Cornell University, Ithaca, N. Y., and certainly is what it is meant to be, "a witness of passing events, and a record of progress." I was especially interested in the complete catalogue of American kitchen garden vegetables contained in this well-printed and substantially-bound volume of about 250 pages. There are many other useful and interesting things in it.

**THE ANNUAL NUTMEG PLANT.**—This was sent out this spring by Mr. Samuel Wilson, of Pennsylvania, as a valuable novelty, producing seeds which would serve as an excellent substitute for the true nutmeg. The seeds were about as large as aster seeds, and of about that shape, and the package contained a dozen or more of them. Although I sowed them with great care, and in well-prepared soil, in a box under glass, I did not succeed in getting a single plant from them. I cannot even imagine the cause of this failure. But being desirous of knowing more about this great novelty, I would be pleased to have any of the readers who sowed seed of it give an account of their experience with it. Send your report to the FARM AND FIRESIDE.

## Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

## MANURING BEARING ORCHARDS.

On my orchard of bearing trees I haul out as many as forty wagonloads of manure to the acre every year and spread it over the ground. I mulch my trees thoroughly. I think it is an impossibility for a tree to bear fruit and live any length of time, making a thrifty growth, unless the ground is properly manured. If it requires all the vitality there is in a tree to ripen and mature its fruit without making any growth, it will not last long. I have observed that from experience. If we can keep the ground rich enough to make a tree have considerable growth, besides maturing its fruit, then there is a prospect of its living a number of years.

I have trees in my orchard that have now stood there twenty-eight years, and to-day they are just as healthy as they were twenty years ago; at least, I sold more than four tons of apples from an orchard of Duchess of Oldenburg, seven by nine rods in size, this past season. The trees bear every year; but this result is only accomplished by means of heavy manuring and mulching. I have other trees likewise that I treat in the same manner. I find as they grow older they require more mulching. The vitality in a tree must be kept up. It appears to me there is a similarity in animal and vegetable life. We must feed a tree, because it is very exhausting for it to produce its fruit each and every year. The results with me from mulching have been very satisfactory. It keeps the ground in good condition and does not let the grass grow. However, manuring may be overdone

with young trees, but when a tree comes into bearing it needs much food.—Wm. Somerville, in Minnesota Horticultural Report.

## INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

**Peach on Plum Stock.**—P. E., Memphis, Mo. The peach may be both budded and grafted on the plum, and does better on plum roots in wet land than it does on its own roots.

**Grape Rot.**—Mrs. J. H., Lawrence county, Ohio. Probably the simplest method for you to follow to prevent your grapes rotting is to put paper bags over them and fasten the bags over the branch with a pin. Use two-pound bags and put them on as soon as the flowers commence to drop.

**Black Ants Around Apple Trees.**—Mrs. H. A., Monroe, N. Y. I do not think the ants injure the trees, unless it be by loosening the ground around them. If you want to kill them, you can do so by observing the following: Find their nest, make a hole in it with a stick six inches deep, into this pour two ounces of bisulphide of carbon and then put a shovelful of dirt over the hole. Bisulphide of carbon can be bought from almost any druggist or chemist.

**Cherry Trees Dying.**—M. S., Osgood, Ind. writes: "Papa gave my sister and me eight fine cherry trees, from one of the best nurseries in Ohio. We set them in our front yard in good order. They all leaved out and began to grow, but now they are dying. They have had plenty of rain. What can we do to restore them?"

**REPLY:**—The trees must have been injured in the root when they came, if they leaved out and then died. There is nothing you can do to restore them. The leaves may have been injured by some insect, which would cause them to drop, in which case they will come out again.

**Eaton, Moyer and Mills Grapes.**—S. B. H., Hagersville, Can. The Eaton grape is a large, promising black grape, similar to Concord in foliage, health, hardiness and quality, but the bunches and berries are larger, skin thin but tough, pulp tender, very juicy, ripens with the Concord or earlier. The Moyer grape is similar to but a little healthier than the Delaware. The fruit corresponds very nearly to the Delaware, but the clusters are not so perfect and the berries are a little larger. It ripens about with Moore's Early. The Mills grape is a promising black grape of excellent quality, vine vigorous and productive. Ripens with the Concord or a little later.

**Preventive for Borers.**—J. W. T., Xenia, Ill., writes: "There is a person here who uses rosin and linseed oil melted together for painting his trees (young trees) to keep away borers and rabbits. He applied it twice in two years without any apparent injury. If you think it safe, I want to apply it to the trunks of my three-year-old orchard of twenty acres."

**REPLY:**—I have never used the preparation you speak of, but have used linseed oil and Paris green for the same purpose without injury. It is my opinion that the mixture used only on the trunks of the trees would not be injurious, and that it would be improved by the addition of some Paris green to it.

**Worms on Gooseberry Bushes.**—Mrs. S. J. E., Owensburg, Ky. If you buy a few pounds of white hellebore and dust it very finely over the foliage you will find the worms destroyed. Paris green or London purple may be used on them the same as it used to kill potato bugs, and if used not less than two weeks before you pick them it will not be poisoned. If the bushes were moved to other ground, the worms would be just as bad, for the worms change their form and become flies. If the insect powder you used had been fresh and pure and you had applied it just at nightfall, it would have killed the worms, but probably it was adulterated, or, perhaps, old, or

both. It is so much in demand it is very much adulterated. I prefer it to white hellebore when it is of the best quality, but I seldom use it now on account of its expensiveness and poor quality.—Strawberry plants may be moved early in the fall or in spring. Be sure and use the new plants that form this year, and not the old plants, which have black roots and do not grow well. Probably you had better buy some good, young plants of your neighbors.

**Fertilizer for Strawberries.**—J. W. S., Ridgeway, N. C., writes: "Which is better for strawberries, nitrate of soda or muriate of potash?"

**REPLY:**—It depends altogether upon the soil. The probabilities are that neither of them alone would prove of much benefit. Nitrate of soda, like all manures containing only nitrogen as a fertilizing ingredient, is very apt to stimulate a strong leaf growth and not develop the fruit, while potash alone would not give sufficient material for leaf production. Again, both nitrogen and potash might be present, and yet, if phosphoric acid was lacking, you would not get a complete development of fruit and foliage. Unless by careful trials you have found your soil lacking or having a surplus of some one element, you had better apply all three. I have given up using much nitrate of soda on strawberry beds, because I have found that in the form of tankage ground I could get the same amount of nitrogen, equally as good, at a much less price. I recommend you to use a fertilizer made of the following, for one acre: 300 pounds fine-ground bone, 100 pounds muriate of potash (high grade) and 60 pounds nitrate of soda. Or you could use 300 pounds tankage, 100 pounds muriate of potash (high grade) and 100 pounds South Carolina acid phosphate. Another good formula would be, 300 pounds tankage and 20 bushels of unleached wood ashes. Use such materials as you have or can buy cheapest that will answer the purpose.

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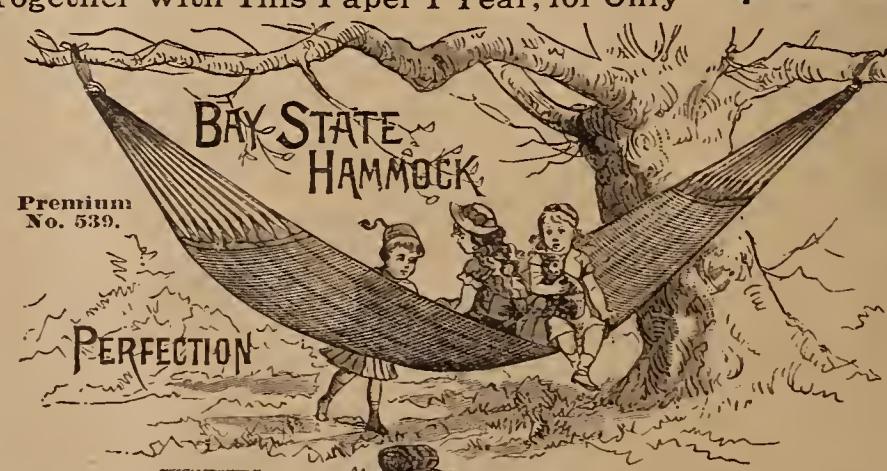
In combination with the Wire Splicer is a Staple Puller. Every one knows how hard it is to get the staples out of a fence post. With this little tool and a hammer they can be taken out as fast as the puller can be placed in position. The same tool also has a claw for drawing light nails or tacks, a hammer head for driving tacks, and the handle is in shape to use for a light wrench; the hook is very useful for handling barbed wire and protecting the hands from injury. Thus there is combined in this one tool half a dozen that would cost separately one or two dollars. The only trouble with the little implement is that it is so handy that every one in the family that gets hold of it will want to keep it. Directions for use go with each tool.

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## Our Farm.

## LITTLE THINGS IN SUCCESSFUL SHEEP RAISING.

**T**HE big thing in sheep raising is success. Success comes from doing little things well and at the right time. The right time does not mean some time; it means the imperious now. An hour's delay is often too late to prevent a loss, a disappointment, a mistake that cannot be remedied.

Successful management of flocks necessitates careful and constant attention to small things, which, to many, are considered insignificant and trifling. It requires more wisdom, intelligence, industry and persistence to raise sheep now in the agricultural states of the United States than it used to. The time was when almost any sort of a sheep would pay for its raising and keeping, and the most ordinary management was all that was required. It will not now. It must be a good sheep, and selected for the purpose for which it is kept, that can give a profit over and above its keeping, that can be depended on with any certainty in profits.

The margins are smaller than they were—so much smaller that no guessing as to investments, methods and managements are admissible. The very closest business calculations are necessary in sheep raising, as in all other enterprises. The smallest mistakes are felt in the general results—the cash receipts. The time was when sentiment, prejudice, fancy and theory had much to do in sheep raising. The lessons of the last four years have shown western farmers that they have something to learn and do very differently from what they were taught by their predecessors. In sheep raising, as in other things, we cannot follow in the footsteps of our fathers. In a new, progressive country like ours, changes affecting society, education, industries and economies are continually occurring, and compel us to "keep up with the procession" or be left behind. There is nothing unreasonable or hard in this. It is a small matter when our eyes are opened and prejudices broken up. The changes are taking place all around us.

The successful men are in the front ranks, and demonstrating the fact that there is money in sheep. The carelessness, the growers, are in the rear, and finding fault with everything. They live side by side with equal chances. There is not much difference between them, but that little difference makes all the difference in profits. Sheep raisers used to get rich by the business. Grain raising used to be highly profitable; cattle raising, horse raising and hog raising were valuable industries, and like sheep raising, have periodic depressions, as well as times of prosperity. Each of these has found economies by which small profits are possible, and these economies are highly interesting; they have come into common favor as a necessity. It was either follow or quit the raising of these things. Why should these industries adjust themselves to new economies and methods, and sheep raising remain in the old ways?

The situation is promising, and, in many respects, hopeful. Sheep husbandry in the United States is coming out of the period of low prices on a most permanent basis of diversified purposes and fitting methods of management. No separate part of the industry is going to be damaged. It will, as a whole, be greatly changed, but improved in every product. It will be done with more certainty, uniformity and satisfaction than heretofore. The smallest factor in methods and management will be taken account of. The flocks kept will be selected as best adapted to the situation, circumstances and surroundings, with a special purpose in view. The managements will be in the line of these special aims. Everything will be done with order and business sense. Nothing will be kept in the flock that is of questionable value, and the products of the flock will be of the highest excellence. A poor sheep cannot be relied upon for a good lamb, fleece or carcass.

Only the best breeds, the best standards of these breeds, with the best health and most vigorous constitutions, kept with reference to special products, will be kept. The highest normal conditions will be sought for and maintained, because nothing else will be profitable.

The world moves. Industries and systems keep pace with progress. Mind and matter are in harmony. Intelligence investigates, compares and shapes the future. If for a moment this is stopped, the wheels of prosperity are hindered, and civilization reverts to the past condition of things.

Sheep raisers are the most intelligent of all live-stock raisers. Only the politicians are ignorant of this fact. Everybody else agrees that sheep raisers know what they need and want. Politically, the wool industry is antagonized. This has been so for a long time, but it will not be so always. The best intelligence on the subject recognizes the justice of their cause and claims. The vagaries on this subject are too apparent to long remain a nightmare and a menace to such an important industry. Because all people wear woolen clothes there is an attempt to set them in array against the wool growers and drag them down first, and then the other industries, on a pauper level with the lowest industrial nations of the world.

There are big things to overcome until our intelligence is more advanced, when the remedy will be plain and easy of application. It is believed by sheep raisers that the friends of wool are scarce; that the incubus resting upon the business is winked at by law-makers. In this, too, we are mistaken, and by it we are doing our political and industrial friends an injustice that we would not if we knew the facts in the case. Let us study this question.

*Illinois.* R. M. BELL.

## EXTRACTS FROM CORRESPONDENCE.

**F**ROM MICHIGAN.—In the lower peninsula of Michigan land ranges in quality from heavy clay and rich loam to sand of very light quality. We have some very level land and some very hilly. Our lands, in a wild state, sell from \$15 to \$40 per acre. We have only one great drawback, that is our long winter and changeable weather. Fruits do quite well here, and most all grains that grow in northern states do well also. Our farmers are most all in debt so heavily that it is hard lines for them and the laboring man.

C. S. K.

*Barry county, Mich.*

**F**ROM OREGON.—Oretown is located in the extreme west of Oregon, within one mile of the ocean beach. The land around is rolling, and fine for dairying and stock raising. We have a fine bay, into which coast boats, that draw seven or eight feet of water, can safely come. We have a fine salmon canary. On the bay, land is worth from \$5 to \$15 per acre, with government land a little back to be taken up. At present everything is growing finely. We have good prospects for a railroad in the near future.

C. G. C.

*Oretown, Oregon.*

**F**ROM OHIO.—Muskingum county is one of the foremost in the state. In point of wealth it ranks high. Corn, wheat and hay are our principal crops, though potatoes and other vegetables are raised quite extensively. Land ranges in price from \$20 to \$75 per acre. Zanesville, the county seat, has a population of about 30,000. Owing to the continued wet weather, the oat crop will be short, but the hay crop is about the greatest ever known. Coal is abundant in this county. Timber is plentiful, but is being rapidly cut out by saw-mill men and stave makers. The farmers are organizing alliances in several of the townships.

S. S. F.

*Otsego, Ohio.*

**F**ROM SOUTH DAKOTA.—The land in Hutchinson county is slightly rolling, with numerous creeks running through it. It is covered with good, natural grass, and when broken grows fine crops without manuring. Last year the drought hurt the crops, but we have had plenty of rain so far this year and all crops are looking well. Land is steadily increasing in value; claims of 160 acres, that could have been bought for \$600 last year, are valued at \$1,000. Eight years ago, when I came here, there were scarcely any groves. Now nearly every quarter section has at least five acres to exempt forty acres from taxation, and one claim in every section is a timber claim. Trees grow very fast here. We have good schools six months in the year, and are not far from railroads. We raise a great many hogs and have never had any disease among them. The main crop is corn, though most farmers raise their own wheat and oats. It is very healthy. Any one wishing a good place to live will do well to come here.

A. A. E.

*Parkston, S. D.*

**F**ROM TEXAS.—You can buy land here that is just as good as any land in the Union, and will produce just as much, for from two to three dollars per acre. There is plenty of timber for fuel and fence posts. It costs about \$2.50 per acre to have the land grubbed for the plow; in some places it costs more, owing to the thickness of the trees. The timber here is all mesquite, except along the streams, where there are pecans, elms and sycamores. We have very mild winters here, and this is a good place for any one to come who has lung trouble of any kind. You can make a living here without working very hard. Of course, we have dishonest people here, as well as anywhere else, although the people generally are honest. Perhaps you think I am some land speculator, and have land to sell because I blow Texas up so, but this is not the case. I am a poor boy. I came here from Pettis county, Missouri, and came here for the purpose of getting a home. There is land here that you can buy for a song, which, if it were in Missouri, would cost one hundred dollars per acre. I think spring the best time to come to this country. It will generally take a year to get located and to build, and get your land ready for the plow. Any one wishing a home where land is cheap, where health is good and where the winters are mild, will find this is the place to come. There are thousands of people in the North who are renting land, some paying money rent and some grain rent. These people are just making a living and that is all. Land is so high there that not one in ten ever makes enough to own a home. Why not take what little money they have, and come here, where they can make a good living and a home also.

W. S. P.

*Waltrip, Tex.*

**F**ROM KANSAS.—We are in northern Kansas, about half way between the eastern and western lines of the state. Cloud and adjoining counties are in a fine-looking country, and it is an easy country to farm. It is all rolling prairie, with no timber except narrow strips or groups along the streams, and artificial groves. One man and team can cultivate from forty to sixty acres of corn and twenty acres of oats. Vegetables grow good, generally, but it is not a good fruit country. If we had a home market, we would do very well, notwithstanding the drouths of adverse seasons; but we are controlled and imposed upon by the Chicago board of trade and the discriminations of the railroads. We must say with sorrow that the railroad management, the banking discrimination, money loan agents, and the prohibition law are the most important curses of Kansas. The prohibition law makes drug stores rich, and under it are many rum holes, from which neither state, county nor town receive a revenue. We have a good prospect for a corn crop in this part of the state. Oats are not a very good crop. The prospects are very good for most kinds of crops, so far this season. Corn is now worth about twenty-four cents, and oats about twenty cents a bushel; but most of us had to sell last fall and winter for twelve and fourteen cents. The Alliance is growing and doing good work. We are not running it into politics, but will support men who will work for the interests of their constituents in the legislature, in congress and everywhere else. The people of the West earnestly pray for the passage by congress of the silver bill in a decent form, the anti-trust bill and the Butterworth bill. They made the dependent pension law, and we give them credit for it, but there is too much wrangling and doing nothing.

S. B. L.

*Clyde, Kan.*

**S**OUTHERN COLONIES.—Some of the lands and colonies in various parts of the South are largely advertised in the papers, and by circulars, etc., with glowing descriptions of their great advantages as to soil, climate, healthfulness and superior business opportunities. I know a large number of people who have been induced by just such promises to buy land and locate in a colony of this kind, and then find things not altogether as expected, and, after awhile, become disgusted with their new home, leave it and return North. I, myself, am rather partial to the South and her climate. I have seen the very superior opportunities which many places of the South offer to the right kind of people. But such people, who can not make a living in the North, are not made of the right stuff to make a phenomenal success in the South, and people who are doing well at the North hardly ever wish to move South in order to do better, although they often and undoubtedly might improve their condition by taking hold of the more favorable opportunities. In short, there is one class of people wanted and needed in these southern colonies; but the large majority of those drawn there by the land agent's circulars are not of that desirable class. I am in receipt of a communication from a resident of the largely-advertised Claremont colony in Surry county, Virginia, and I give an extract of it, with the express statement that my own observations, during two visits at the colony, rather confirm what Mr. W. B. Jones tells us of the conditions prevailing there. The following is from Mr. Jones' letter:

"I came here two years ago next September, and more or less northern people have settled in the colony. I will first tell you of the draw-

backs. Some settlers come with too great expectations and soon get homesick and go away. Others come for their health, and they are not benefited by so doing, and they leave. Others come with a little money, buy 100 acres of land or more, pay part down and give a mortgage for the rest; they can scarcely live and keep the interest paid, and, as a rule, give up in despair, go back North and leave their land in an agent's hand to sell at a loss, or, until the sheriff sells it. Others come and buy 20 acres or less, and, perhaps, pay for it; but it is all wood land; they have but very little surplus money to live on while they are trying to clear off their lands; they see they can't live on their earnings, and move away. Others come with money, purchase a farm without buildings, put up a good house, barn, etc., and get ready to raise crops; the land being more or less exhausted by the old way of southern farming, poor crops are grown, and after three or four years they get discouraged and sell their land for several hundred dollars less than they gave. Then there comes a class of men such as merchants, blacksmiths, painters, and non-workers, until the town is overstocked; they soon leave again. Many come from cities, and know nothing about farming, pay out all their earnings for a farm, and try to be farmers. But they soon find that farming is a trade that they know nothing about, give up completely discouraged, and offer the farm for sale at much less than it cost them. The glowing circulars sent around the country are deceiving the people, and many start and move to a strange place, even without first going to see it. Such comers as those mentioned are doing more harm to a settlement than good. Wherever they move they curse Claremont, which will hinder others from coming. The prospects now are that there is a better class of people settling in the colony than when first started; and with such people prosperity will follow. The village of Claremont is improving. The people are enterprising and eager to improve, as far as their means will admit. A branch of the Atlantic and Danville Railroad runs into the village and down to the James river. There are fine residences in the place. The colony is wooded to a great extent; therefore, farms are only partially cleared. It has grown up to a wilderness since the war; timber, not large, mostly pine and oak. There is a great trade in ties and wood; Claremont docks are filled with the same, going to all northern ports. The wood is for kindling. Lumber is shipped extensively. There is not much produce raised to sell, except peanuts. Farmers depend more on their wood for a living than anything else. We have not the market yet that we ought to have. We have to send our chickens, and berries, and small marketable stuff, to Richmond or Norfolk. In the past year a party from Pennsylvania has put up a saw-mill and is shipping cypress lumber and shingles. Another company have a broom-handle factory, the product of which they ship to England. We have two or three grist mills in the colony, several churches, schools are improving, and the southerners are learning our ways and make us northern people welcome. Our climate is fine and the prospects are that we will have fair crops. To take it altogether, Claremont is on the side of prosperity. The more northern people come, the more it will prosper, if they are of the right kind. We don't want white-fingered clerks, or book farmers, but we want men who are not afraid to shoulder the axe, or to take hold of the plow-handle and turn over the sod that has lain for centuries beneath the light of the sun. Virginia soil is not so poor as some would have it to be, if properly tilled."

JOSEPH.

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## Our Fireside.

## A MEMORY.

Why art thou silent, darling?  
As we sit together here,  
And by the fading twilight,  
On your cheek I see a tear.  
  
We look together seawards,  
The tall ships ride at peace,  
Give me your soft, white hand, love,  
And then your thoughts release.

My darling still is silent,  
But now I hear you sigh,  
Dear, I'm only thinking  
Of an autumn long gone by.

Only remembering a sunset  
And a ship that long ago  
Sailed out from the harbor  
To a haven you do not know.

—D. Parke Washington Custis.

## THE WANDERER.

Beneath the stars her lover may be sleeping;  
So, when the earth is wrapped in shadows dim,  
Her gaze is fixed on faithful planets keeping  
Their vigils over him.

Somewhere the envied breeze with light caresses  
May lift the dusky masses from his brow,  
Until in dreams it seems her touch that blesses  
The weary wanderer now.

Somewhere, perhaps, a savage horde is stealing  
With dread intent about his slumbers deep,  
Unmindful of the love unweared kneeling  
To guard his lonely sleep.

Or it may be 'neath skies of tropic splendor  
Strange scenes before his dying eyes grow dim,  
While fate denies each office, sad as tender,  
To her who waits for him.

Yet, trusting soul, thy deepest forces wielding,  
If unavailing tear, and thought, and prayer,  
Love's privilege is less the power of shielding  
Than strength to share.

And somewhere, let us hope, in lands Elysian,  
Each asking heart in life, not death is stilled,  
And, in realm too fair for mortal vision,  
Love's dreams are all fulfilled.

—Grace S. Wells.

## Hope Deferred

BY MIRIAM A. MERRICK.



HE beautiful legend comes stealing down to us through the ages, that when the helmsman Death steers his somber bark to the immortal shore to carry some pilgrim hence, if the voyager be one who has just entered the holy relationship of motherhood, he bears to her, from the Madonna's hand, a lily, the flower of the annunciation, whose penetrating fragrance thrusts aside all barriers and opens wide the eternal gates for the mother to enter and evermore dwell with God and his holy angels.

In a beautiful villa on the banks of a belle river, on the Kentucky shore, a young mother was yielding up her life for the newborn child that lay close to her slowly-heating heart. A voice, deep-toned yet trembling with emotion, was slowly repeating this beautiful myth to the dying woman—the voice of one who would gladly have surrendered his own grief-stricken life to have saved from the destroyer's cold grasp the life of his heart's most precious treasure, his beautiful young wife, the mother of his new-born babe.

The handsome face was haggard, and as pale as the face of the dying woman, as Raymond Gilbert reached forth his strong arm and clasped to his grief-burdened heart the immortal trust bequeathed to him by his dying wife. A few more faint pulsations of the loving heart and the gentle spirit of the wife of a few brief years winged its way through the evening shadows back to the God that gave it. The home so bright, so beautiful, the abode of love and happiness supreme, was now a scene of desolation and grief.

Aunt Phyllis, the faithful old nurse of two generations, stole quietly into the chamber of death, and taking the precious gift from her young master said:

"B'essed is de dead dat die in de Lo'd," Massa Raymond. Dis is what de good book says."

Such an intrusion of proffered consolation from another in this hour of extreme anguish would doubtless have been resented by the proud, cold man, but there was something in the tone and manner of the faithful old servant that made the words fall as a sweet balm upon the wounded heart.

Raymond Gilbert missed the presence of that evangel of love and tenderness that had walked by his side. He missed her earnest praise, her gentle reproofs, the mute blessings of those loving eyes. The presence of her in each hour of trial was ever hopeful, ever strong and brave. The love of his young wife had filled his life with music and made his

home an Eden of perpetual bloom. Possessed of a nature proud and strong, with a death-defying courage, he went forth from this supreme trial a stern, cold, silent man, maled in an all-consuming grief that forbade the approach of sympathy or condolence. He watched the growth and the daily development of the motherless child with intense yet silent interest. Little Hazel not only possessed the dead mother's name, but also inherited her gentle beauty and her perfection of form. It was this reflection of the cherished wife in the infant child that enlisted the little love remaining in the young father's heart, and this alone gave little Hazel a place in his affections and an influence over him that might have never otherwise existed.

Raymond Gilbert chose to tread this wileness of mortal grief alone as the years went by. His heart's deepest, tenderest love, that "holy lamp within a sacred shrine," had gone out, leaving him in darkness. Where could he find oblivion for his heart's great sorrow better than by plunging into business? His commercial interests had grown until the income derived therefrom, united with the handsome fortune inherited from his father, made him at the age when most men are in the dawn of success, a man of wealth and prominence, honored as one of Kentucky's successful sons.

It was at this period of life that an old friend, a college chum, summoned him to his home where he lay dying.

"Dear old boy, ever kind," said the dying man, extending his wasted hand to his classmate and friend, as Raymond reached his bedside, "how promptly you have responded to my call. How I have battled with the mighty foe—alas, I must own him conqueror. How I have prayed to live for the sake of my loved ones, but death is inexorable. I have sent for you to ask of you a great favor, to beseech you to accept the guardianship of my only child, my boy. Other than an honorable name I have little to leave him. The home, enough for my wife's maintenance and sufficient, if judiciously managed, to educate my son, is all of my inheritance to my family. Raymond, my trusted, noble friend, will you accept the trust?"

Promptly taking the wasted hand of his dying friend, Raymond Gilbert, in a low, firm voice, replied:

"I accept the sacred trust, and may God deal with me and my as I shall deal with your boy, whose care and interests you yield to me in this solemn moment."

"Amen! God bless you," came faintly from the lips of the dying father as the death dews gathered on his brow.

\* \* \* \* \*

Let us pass by the years with their varied scenes, and introduce our reader to a youth and maiden wandering side by side along the margin of a woodland stream, in the closing hours of a midsummer's day. The skies overhead are purple and gold, and the young hearts of the happy pair beat in unison with the carols of the birds singing amid the branches. Light winds whisper Aeolian strains through the leaves, and, oh, how lightly weighs the burden of being upon the youthful pair as love's miracle whispers of a rosy to-morrow and a sound like the strains of a marriage chime comes stealing on the ear. Hail, holy love, bright daughter of the skies! Intoxicated with the blissful dream of to-day, what seek these loving hearts of the shadows that may hide to-morrow's sun?

At last, wearied, the youth and maiden seat themselves upon a grassy slope that runs down to the water's edge.

"Hazel," spoke the youth, fondly gazing into the soft, dreamy eyes of the maiden at his side, "I dare not, in honor or justice to your father, continue my daily visits to you, without seeking my guardian's consent. And yet, an idea of honor almost restrains me from asking the favor."

"Nonsense, Eldred, you have such high, old Kentucky sentiments of honor clinging to you. They are not in harmony with this age. Why, have we not been playmates from earliest childhood, constant companions? I declare, the old home seems to me as much yours as mine. Has my father failed in his hospitality or neglected to give you a generous welcome at any time, that you should suffer these peculiar convictions of duty?"

"Hear me, my own," tenderly replied the young ward. "The sweet revelation to which our hearts have recently awakened has aroused my conviction of obligation. In this dawn of love we must not forget the respect due your father. And yet, a few months since, when it was my good fortune to discover that infamous plan designed to ruin your father, in the first grateful emotion kindled in his heart by a knowledge of the discovery, my guardian said, 'Eldred, you have saved me from ruin and dishonor. You have been faithful, honest and intelligent in the discharge of all your duties since you have been my ward and in my employ. I am, therefore, glad to be able to reward you—in a degree, at least—for your fidelity. I not only promote you to a partnership in my business, but make you also my confidential adviser. And remember, whatever favor you may seek of me, if in my power, it shall be granted.' And now, Hazel, to go and ask your father for the priv-

ilege of winning from him his heart's most precious treasure seems almost presuming upon his generosity, while to steal the treasure without his knowledge would be gross ingratitude—robbery, indeed."

"Ha, ha, ha," trilled the soft, musical voice of Hazel, as she responded, "was ever mortal man so perplexed! What a labyrinth of difficulties your well-trained conscience and code of honor causes you. Really, the quickest, safest retreat from this wilderness of doubt and fear is to relinquish the so-called treasure, bid a final farewell to old Kentucky and seek new fields of conquest."

"When will you have done with your cruel sarcasm, Hazel?" returned the youth. "Verily, it's the same old story of Eden repeated," he smiled. "With sweet knowledge come curses as well as blessings, alas!"

"It's well I am not in the least sensitive, as I might take woful offense at your insultation, sir," said Hazel, with mock dignity.

Eldred Benedict possessed a high and impregnable code of honor; therefore, he sought the first opportunity to confess to his guardian the great love of his heart for his beautiful daughter and assure him of her acknowledged return of the sentiment, finally asking permission to visit the dear old home as an accepted suitor, with the hope of proving worthy of the daughter's hand in marriage at some future day. Strange as it may appear, such a result from the companionship of his daughter and ward had never dawned upon Raymond Gilbert's mind. He imagined their attachment of the nature of that existing between a brother and sister, and had, therefore, made no effort to discourage their intimacy or keep them away from each other. The proud guardian's astonishment and chagrin was unbounded when his ward confessed his sweet secret and asked permission to continue his visits in the role of a lover. Observation, however, impressed the father that vigorous opposition only served to fan the spark of fervent love, once kindled, to a flame. His wisdom suggested the case must be carefully, wisely managed. He therefore simply advised his ward to dismiss all thoughts of marriage until each had seen more of the world and tested the fidelity of their young hearts. This was not a welcome proposition to the impetuous young lover, yet, he knew rebellion against the mighty will of Raymond Gilbert would result disastrously to all concerned.

Eldred Benedict went forth from this interview with wounded pride, with emotions of deep humiliation, for there was an indefinable conviction in his hitherto hopeful heart that he was not the one to whom his guardian would confide the future happiness and care of his only child. Bitterly disappointed, despondent, Eldred slowly wended his way from this interview to his mother's quiet home, there to find that never-falling balm of holy sympathy that always abides in a loving mother's heart—the tender sympathy this young heart craved as never before.

After the young ward's departure, when Raymond Gilbert found himself alone, he sought to analyze his true feelings concerning this unexpected disclosure, and reflect what his ward's claims upon his kind consideration were. The youth, he could but admit, had proven himself of great value to him in his extensive business. That he owed him a debt that gold could never liquidate he could not deny. And yet, Eldred was not the style of lover he should have chosen for his daughter. The proud father's aspirations for the beautiful, accomplished girl were exalted indeed, yet how dare he honorably forbid the companionship of these two who, from early childhood, had been together? How dare he seek to turn them from the rose-wreathed gates of the paradise they yearn to enter, where love's immortal summer blooms? All he could do was to discourage an early union, and secretly plan and fervently hope some unseen hand would bar them from their hearts' sought heritage of bliss; that some mystic agent would destroy the youthful infatuation—might build an impassable hedge of thorns.

The evening of the day of this unhappy interview was perfect. Nature breathed without a sigh, enthroned beneath a cloudless canopy. Love's image seemed everywhere pressed on earth's prolific bosom, to the young lover, notwithstanding the disappointment and doubts that haunted his heart, as he trod the rich carpet of living blossom and verdure that spread over the grounds leading from the gate up to his guardian's beautiful villa, where sat Hazel on the veranda, lost in meditation, all unconscious of her lover's approach until she heard the welcome voice in his tender greeting. A glad cry escaped her lips as she hurriedly said, "Oh, I'm so glad you are here, Eldred; I could hardly wait for you to arrive. We are going to have such a lovely time. Such delightful people have invited us to join them to attend the races—Colonel and Mrs. Edwards, and two young lady guests fresh from school, and Mrs. Edwards' handsome brother, Ned Pendleton. Oh, won't it be too charming?"

"How many more lovely, charming people will compose this remarkable party, my little adjective slinger?" laughed Eldred. Alas, with a laugh so hollow it startled the heart of the little beauty, who quickly turned a penetrating look into her lover's dark, earnest eyes. The pair were now slowly wandering

over the beautiful grounds. After some moments of silence, the lover, turning his thoughtful eyes upon Hazel, said:

"This, I fancy, is like Eden, ere sorrow's harp was strung. Will clouds o'er veil this sky o'erhead? Will these soft winds ever sweep a harp of woe? How oft earthly Edens are desolated in their budding beauty! God forbid, dear love, ours so glorious in anticipation should thus be blighted."

"How strangely you talk and act this evening, Eldred. What has caused this depression of spirit that invokes such mysterious words?"

"Hazel, your father granted me the interview I craved," returned the lover.

"Oh, I am so glad. But tell me, quickly, what he said," urged the impulsive creature.

Eldred, clasping the little hands upraised in gleeful expression of delight, said:

"Hear now, applaud afterwards. It was not what your father said that impressed me so much as his silence. It is quite evident he is not ready or anxious to welcome me into a nearer relationship with himself or his daughter, that he does not consider me worthy of so precious a treasure as his daughter is. What wounded and humiliated me, Hazel, was the expression of surprise—ay, indignation—your father could not hide, when I made known the object of my visit. That a poor youth, unknown to fame and fortune, should dare aspire to such an honor, was evidently unpardonable presumption in his eyes." The beautiful head drooped, the soft eyes filled with tears, as the young lover continued: "Your father shall see the day he will repent this. That he will not blush to bestow his daughter to an honest, honorable man. Heaven help me, the day shall not be far distant when he shall not spurn an honorable love of a pure, true heart as a worthless gift."

"Oh, Eldred, you must have misunderstood my father, whom I have heard repeat your virtues times unnumbered. He honors and esteems you, and only yesterday said in my hearing that you had richly compensated him for his care of you, for his interest in you."

"Aye, there's the rub! He could esteem, admire, even love me as a son, so long as the relationship was a mere sentiment, but the instant I seek to make it more, his feelings are subject to a wonderful revolution. The sacrifice is too great for the proud, ambitious father. I can only accept the fate of many another."

"How readily you relinquish me, Eldred. It's cruel—cruel!" cried the artless Hazel, no longer able to restrain her emotions.

"Give you up, relinquish your love, my own, my beautiful? What care I for the poor, miserable girl set about you. The fairest flowers bloom on the brink of danger. How oft I have endangered myself to humor your sweet whim for the June roses that hang o'er the rugged rocks. Hazel, my royal flower, I'll peril life, that I may win and wear the matchless trophy of thy heart's priceless love."

The burning assurances of the ardent lover hushed the tumult of doubt engendered for a moment in the loving heart, and Hazel smiled through her tears as she turned her soft eyes, so full of faith and love, upon Eldred's earnest face.

"Well, well," said he, the storm of passion somewhat lulled, "evidently, your father intends to put us on a probation to test our love, prove our constancy and so forth. Promise me, dearest, that naught shall ever come between our hearts; that no human power shall ever break the chain that binds our beings as one; that you will resist every influence that might estrange us."

"Do not wrong me, do not wound me, Eldred, with this counsel to fidelity. I pray you, honor me with the faith wherewith I honor you. I do believe, erelong, papa will repent; he cannot endure to see me unhappy. And oh, won't I be miserable," said the little elf, slyly.

The time for the races at last came. A fair day never dawned for the sport. The sun kissed the old Kentucky hills with gentle warmth, while the shade was cool and inspiring; a gentle breeze fanned the grand stand with its burden of beauty, while the crowd was the largest in the history of this noted locality. Representatives from the prominent old families from over the river and from the Kentucky hills crowded the green, while many could be seen rushing for the most eligible seats under the betting booths. Bright colors were everywhere displayed, and the fair ones vied with each other in contributing grace and beauty to the occasion. On an airy veranda of one of the club houses sat the little party of which our heroine was the center, attracting young and old by her artless beauty and winsome ways. The introductions were over and all were chattering merrily. The races had been conspicuously inaugurated, the contests were exciting and finished close.

The most important race of the day, especially to one little party, was about to come off. On a grassy knoll near the timers' stand stood a handsome bay, covered to the eyes with an elegantly embroidered blanket. It was Liechester, the winner of the Derby at L., only a few weeks since, the prime favorite for Latonia's great event. The colored attendant was giving the finishing touches to his charge, each like a caress of love—now stroking his

glossy, satln coat and patting his shapely head as if to impart courage for the approaching contest. The beautiful creature was in high spirits, impatiently pawing the turf. A group of admirers and backers surrounded him, anxiously waiting and chatting. Among them was a youth of handsome face and faultless physique, of graceful and dignified bearing, a very Adonis in the eyes of the fair. This was Ned Pendleton, Mrs. Col. Edwards' brother, the proud owner of the great winner.

"Be quick," he urged his attendant, "can't you see the beauty's drying?"

A bucket of water was produced, from which Liechester sipped modestly, then nodded his head, as if to signal he was ready. A trim, colored jockey, lithe and graceful, now joined the group, and stood at his master's side, waiting instructions.

"There he is, Jim. You have ridden him to every success; you know what to do," quietly said the young turfman.

"Ah, ah, sir!" responded the king of jockeys, who, with a bound, was in the saddle, and grasping the bridle he turned the racer's head toward the track gate. Horse and jockey were gone and the young owner turned to inquire about the betting.

"Jis' 'member dis little black fool tolle you Liechester ain't dun goin' fer to win dis race," said Porter, a diminutive, implike jockey, black as tar.

"I hope de 'ristocrat will be beat," said another.

In the grand stand the band was playing, and the great multitude were soon cheering their favorites and riders as they galloped by to take position at the half-mile post. Excitement never before known ruled; the crowd grew wild, the uproar was maddening. The race was run, and lost; slowly the king of jockeys crossed the track, his eyes bent on the ground. No hand reached forth with warm congratulations, no words of praise greeted him. A disconsolate moan escaped his lips, as entering the room, he tossed saddle and whip to the waiting valet and sank into the nearest seat, his eyes now suspiciously red. Poor Liechester had sustained his first defeat, his Waterloo all the more emphasized with one little party because of their interest in his handsome, young owner. Large sums were lost on the favorite, as his victory before the race was a foregone conclusion, but as a king of jockeys was wont to say, "Raclin' is uncertain."

Ned Pendleton would fain have quietly slipped away from the scene of defeat without again meeting his sister's guests, but this, he knew, would have been unpardonable in her eyes, and he must needs again face the company. The first to greet him was the warm-hearted, impulsive Hazel. With her heart full of sympathy she exclaimed, "Oh, Mr. Pendleton, I'm confident there's been fraud practiced somewhere. I'm so sorry for you, for poor Liechester." The defeated young turfman, gallantly presenting his arm to his fair sympathizer, proposed a stroll in a more quiet part of the grounds.

Eldred Benedict, wounded, suffering from his recent disappointment and humiliation, had been jealously watching Hazel as she hastened to comfort the handsome young turfman with tender words of sympathy, and the moment the pair were lost to sight the demon jealousy sprang, full armed, into being in his heart, taking full possession. In vain he tried to dismiss this foe to peace and comfort; in vain he tried to appear interested in the conversation going on. All the evil emotions sinful flesh is heir to seemed strivings in his soul, hitherto at peace with all the world.

"What a fool!" he last reflected. "What claims have I on Hazel Gilbert—this scion of Kentucky aristocracy, this humored child of fortune? Gambler, libertine, though this handsome fellow may be, he will be more to the fancy of my proud guardian, who can easily delude the pure heart of this unsuspecting child."

Reader, if you have never known the horrible torture of jealousy, seek not to sympathize with our hero, from whose lips a mauling cup of bliss had been so suddenly, so cruelly, dashed. In vain he sought to crush the mighty passion that, reigning in his heart, as, glaucling down the shaded path o'er which the two had strolled, his anxious eye beheld them returning. Hazel, interested in what her companion was saying, was unconscious of being so near her lover until, suddenly glancing up, she met his earnest, reproving eyes and was startled with the pallor of his face, while the stern look chilled her warm heart as he said in cold, measured tones, "I need not inquire if you have enjoyed your stroll; your prolonged absence and joyous faces tell the story." His words were like barbed arrows to the loving heart of the innocent Hazel.

The day at last closed. The farewells of the little party were exchanged, and the lovers were driving homeward over a charming road, when Hazel, conscious of her lover's displeasure, yet innocent of any intentional wrong on her part, found courage at last to say, "Eldred, what in the world has wrought this transformation of spirits in you? Since I have known you I have never before seen you in this peculiar condition."

"Doubtless, you never have, for I have never before in my life had cause to feel, to suffer the agony of heart I have to-day suffered."

"I implore you, tell me candidly, quickly, what is wrong."

"It's all wrong. Think ye it's right I should be defrauded of my heart's most sacred treasure—of my life, my all?"

"Did you lose largely at the races?" asked the innocent Hazel, all unsuspicious, yet thus adding fuel to the fire already raging in her lover's breast.

"Yes, I'm bankrupt," responded Eldred. "Yes, I have lost heavily—lost all."

"Oh, don't you know, foolish boy, papa will come to your rescue? I thought you disapproved of betting on horses as a species of gambling. How my heart ached for poor Mr. Pendleton. He was inconsolable over his favorite's defeat. Is he not handsome?"

"Who—the horse or man?" laconically returned our hero.

"Ob, Eldred, why need you be so upset, so cross, over a little loss like yours?"

"Would to heaven my loss were insignificant, was paltry gold and silver. Alas, I have lost a gem that will never be restored!"

"Eldred, I beseech you as you value my heart's peace and love, have done with enigma and in plain language tell me what all this means."

"What blissful ignorance! What charming innocence!" bitterly returned Eldred.

"I ask bread and you give me a stone," said Hazel, betraying emotion in her voice, her gentle heart wounded, and at last, loth to yield herself to tears, impatient and vexed at her obdurate lover, she resorted to bitter accusations that only widened the first breach ever coming between these loving hearts. When the pair reached home they parted with a cold good-evening at the door. Eldred leaped into his vehicle and drove away at break-neck speed, in a state of frenzy. All night long he walked his room, his heart a prey to the most desolating despair, while now and then a prayer of sternest agony escaped his soul, and like a bird going farther amid the darkness, battling its way toward heaven.

And Hazel, in this hour of her lover's agony bowed in the seclusion of her own room, was weeping her loving heart away. Poor, foolish hearts! O thou of little faith! Comes there no gentle tone, no sweet caress, the memory of no tender assurance, to plead for you amid these shadows of distrust?

When guardian and ward met the next morning, Raymond Gilbert was forced to contemplate the white, haggard face, the despair in the dark, earnest eyes lashed his soul with upbraiding. He knew the least proffered sympathy would be but adding insult to injury in his ward's esteem. Yet, the youth's appearance haunted him; the spirit of the dead father seemed chiding him, crying, "Is it thus you have kept your vow to the dying?" Every day put the possibility of a reconciliation farther and farther from the lovers. Ned Pendleton, the young sower of discord, followed up his introduction to Hazel with repeated visits, drives, moonlight evenings on the water, visits to the opera, theater, etc.; indeed, everything seemed planned to make Hazel forget the past, to cheer her heart and allure it from the great sorrow that had fallen upon her hitherto bright life.

Raymond Gilbert sought to impress his daughter with the infamous deception that her lover had grown weary, was recreant to his early attachment, and had taken this ignoble way of escaping a bondage whose chains were becoming distasteful to him. Marvel not, reader, that Raymond Gilbert was haunted day and night by the reproving spirit of his dead friend and classmate, until life became a burden to him. Marvel not he was doomed to suffer remorse for his false representations to his innocent child, for his base ingratitude to his ward, for seeking to wreck two young lives that should have been precious in his sight.

In the early part of the season following these sad events, the father conceived the plan of hurrying Hazel away to a fashionable summer resort, in company with her friends, Colonel and Mrs. Edwards, who adroitly invited the handsome Ned to make one of the party. When Eldred Benedict heard of this arrangement he felt that Hazel was indeed forever lost to him. But, oh, he must save her, he thought. Not for himself, but from another; from this horrible sacrifice—from this man, concerning whom the darkest stories were circulating; who had ruined more than one young life, who thought it no crime to rob innocence of its virtue, and was now masquerading as an angel of light to deceive and destroy. How Eldred hoped and prayed, ere too late, the record of this base designer, this infamous deceiver, would reach the ears of this proud, selfish father.

It was the evening before Hazel's departure from home. She had sought seclusion among the flowers, those short-lived beauties so emblematic of her own happiness. A mist came into her eyes as she secretly sighed, half aloud, "It is madness to cherish the dream of that sweet faith of old." Yet words of cold reason failed to silence the eloquent pleadings of her heart. Oh, that she might once more meet Eldred here amid these old haunts, sacred to

her heart by sweet memories. She had not met him for weeks. Some one said he looked sad, pale and hopeless; that he dwelt in seclusion. Now she had reached the hallowed spot where love's impassioned tale had first been told. She knelt upon the grass and lifted her heart to heaven for help to endure this trial that had darkened her young life. She heard a footstep that awakened a vain hope in her heart. No, it was not Eldred, but her father, with flushed face, strangely excited for the cold, calm man.

"I am glad to have found you alone, Hazel," her father hastened to say. "I have a matter of importance to present to you. Would you be very sadly disappointed should you be prevented from joining the party to-morrow that start for their summer's sojourn at the sea-side?"

The sweet face glowed with delight as Hazel promptly responded, "Most agreeably disappointed, my father."

"Is it possible?" returned the father with a sigh of relief. "Perhaps the present is as favorable an opportunity as I shall have to disclose a painful secret to you; may you find strength to bear the confession I am driven to make. First, this handsome youth who has been so devoted to you recently, I have learned, is one of the basest villains unhung, utterly void of principle and a man no true father would ever permit to visit his daughter. I have proven beyond doubt the truth of these serious accusations against young Pendleton, and promptly forbid him ever again to enter our home. I trust your interest in him is not so great that this revelation will make you unhappy."

"Have no fears. I was learning to distrust this handsome youth," answered Hazel.

"Perhaps my saddest task is to come, my child. I fear, unless for some unforeseen interposition, ere many weeks I shall be bankrupt. I cannot now see a shadow of escape from the disaster. I have secured our home; your mother's inheritance has been secured to you. I shall labor to ward off such a direful calamity, but thought it best to prepare you for it should it need come."

Hazel pressed a kiss upon her father's troubled brow and tried to comfort and cheer him. Never had she seen him so tender, so subdued. Never had she loved him more.

Having an engagement, Raymond Gilbert left his daughter to her own reflections where he found her.

"Oh, is it possible," thought Hazel, "that this is a disguised blessing? Is it possible that behind these clouds that are o'er-baldowing me the sun still hides and a brighter day will dawn for me? O Eldred! Eldred! Why have you forsaken me? Never has my heart been unfaithful to you; I gave you the first, the only love of my young heart. Why have you despised the gift?" The little, shapely head bowed upon the moss-grown rock where Hazel sat, and the tears mocked her long control and flowed down her soft cheeks. As a prayer went forth from the depths of her supreme despair, like the weary dove seeking rest, she pleaded for peace of heart. As if in response to her fervent pleading there came upon her a sweet peace. Hope, like a bow of promise, spanned her tempest-tossed soul. A mysterious feeling came stealing over her, as if some unseen spirit was hovering near. She seemed no longer alone.

"O Eldred! Eldred!" again the cherished name escaped her lips, and as if in prompt response to the call, there fell upon her ear a well-known voice, and she was clasped in her lover's arms, while silence, more eloquent than words, brooded like a gentle spirit over these long-estranged, reunited hearts, and young love, rose-crowned, was aglow triumphantly enthroned.

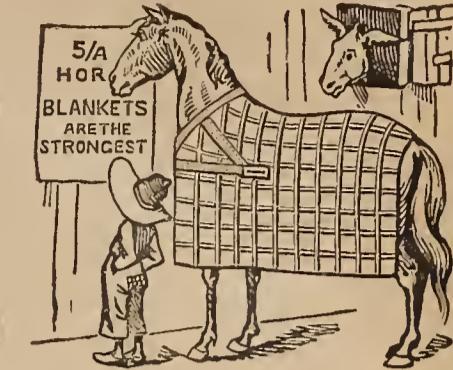
There is little more to tell of our simple story. The hour came when the proud, ambitious guardian bowed humbly before his despised, mistreated ward, whom he sought to deprive of his heritage of love—his heart's rightful heritage—but our hero martyr, rising above it all, forgave his foe, and returning good for evil, assisted him to extricate himself from a financial embarrassment that threatened to overwhelm him. Thus justice triumphed and love reigned. Beneath a rose-hued sky, rocked on love's gentle waves, these loyal hearts are gliding down life's stream to that fair clime where love immortal blooms.

#### MEDICINE NOT AN EXACT SCIENCE.

"This alone is certain; there is nothing certain." This is especially true in medicine. There is no honest physician who will warrant a cure, or say with certainty, "I can heal you." All that he can do is to use the means in his power and "spare no pains." Still, if any remedy has proved efficacious in many cases, curing obstinate and chronic ailments, one is justified in giving encouragement and recommending its use. Such a remedy is Compound Oxygen. The result of years of labor and study, it has proved eminently successful, and is recommended, not only by patients, but by many physicians who use it in their practice, and also in their own families. One of our patients writes: "I need not attempt to describe the state of one who suffers from insomnia. It is enough to say, I know by experience. For many months I did not sleep more than three or four hours out of the twenty-four, could not work, and lost forty pounds in weight. Now I no longer lose flesh, can work, and, best of all, can sleep. I not only say, 'blessed is the man that invented sleep,' but 'blessed be the man that invented Compound Oxygen.'" DR. STARKEY & PALEN:—"I used your Compound Oxygen Treatment for very serious trouble with my throat and lungs. At the end of five months I found myself a well man." WILLIAM PENN NIXON.

Mr. Nixou is widely known as the editor of the Chicago "Inter-Ocean." We can furnish you with hundreds of testimonials. Write us and we will send, free, our brochure of 200 pages, containing abundant evidence, a history of Compound Oxygen, records of cases, and a great deal of valuable and interesting reading. Address DR. STARKEY & PALEN, 1529 Arch St., Philadelphia, Pa., or 120 Sutter St., San Francisco, Cal.

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**LEROY, OHIO, Dec. 15, 1889.**  
Your Peerless Atlas of the World surpasses anything I have ever seen. It is all you represent it to be and worth ten times its cost.

**ELIZABETH WRIGHT.**

**BOWLING GREEN, KY., June 12, 1890.**  
The Peerless Atlas is as good as one we should have to pay \$10.00 for. My neighbors think it is a wonderful book. **AMELIA K. STEVENS.**

## Our Household.

## BIRTH OF THE OPAL.

The Sunbeam loved the Moonbeam,  
And followed her low and high;  
But the Moonbeam fled and hid her head—  
She was so shy—so shy.

The Sunbeam wooed with passion;  
Ah, he was a lover bold!  
And his heart was afire with mad desire  
For the Moonbeam pale and cold.

She fled like a dream before him;  
Her hair was a shining sheen;  
And oh, that fate would annullate  
The space that lay between!

Just as the Day lay panting  
In the arms of the Twilight dim,  
The Sunbeam caught the one he sought,  
And drew her close to him.

But out of his warm arms startled,  
And stirred by love's first shock,  
She sprang afraid, like a trembling maid,  
And hid in the niche of a rock.

And the Sunbeam followed and found her,  
And led her to love's own feast,  
And they were wed on the rocky bed,  
And the dying Day was their priest.

Aud lo! the beautiful Opal,  
That rare and wonderous gem,  
Where the Moon and Sun blend into one,  
Is the child that was born to them.

—Ella Wheeler Wilcox.

## HOME TOPICS.

MUSTARD SAUCE.—As this is the season when cold meats are eaten with more relish than hot ones, I will give a recipe which is considered very nice by all who eat such condiments.

Slice four large onions and cover them with vinegar. Let this stand two days, then drain off the vinegar, add mustard enough to thicken it and one teaspoonful of sugar, one teaspoonful of salt and one of cayenne pepper. This is especially nice with cold, boiled ham or tongue.

MINCED CABBAGE.—Cut the cabbage into quarters, and boil it until tender in salted water, having water enough in the sauce-pan to cover the cabbage well, and let it be boiling when the cabbage is put in. When it is tender, drain it in a colander and then chop it fine. For a quart of chopped cabbage, put two teaspoons of butter and one of flour in a frying-pan, and, as soon as it is hot, put in the cabbage. Season it with pepper, if you like, and add two tablespoonfuls of vinegar. Stir it constantly until it is hot. Heap it on a dish, make smooth with a knife and garnish with slices of hard-boiled eggs.

TAKE CARE OF THE GIRLS.—While I fully believe that every girl should be taught to work, and at an early age be

back ache. I know a lady who has suffered for years with a weak back, the result of carrying one of the younger children. She says: "I have no doubt it has robbed me of ten years of life, besides causing untold suffering. Mother did not know it would hurt me, and so the mischief was done."

Young girls are often allowed to lift heavy tubs and boiler on wash-day, buckets of milk and cream in the dairy, and more heavy pieces of furniture at house-cleaning time. They feel strong and do not know that it will hurt them. Girls from ten to fifteen years of age cannot be looked after too carefully. Their life is all before them, and its happiness and

From the earliest housekeeping, bags have been an important part of furnishing, in a small house taking the place of closets. As our ideas expand and our habits become more luxurious we do not give up pockets; no, we multiply them in number and lavish upon them extravagant decoration.

Fancy fairs have been of great interest and of infinite variety where only bags were sold. Certainly, one always makes an acceptable present. Last winter I saw a lady making one which struck my fancy. It consisted of about a yard and a half of black satin, which, being doubled to form the bag, made one three quarters of a yard long. On this was laid a piece of

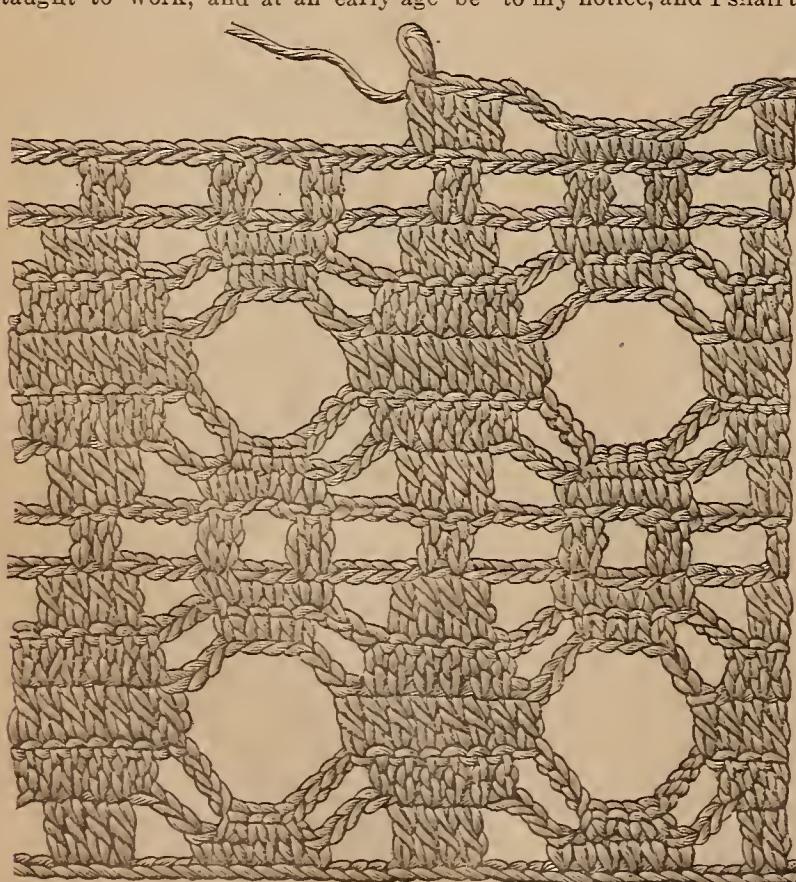
pieces; it is made of duck, a kind of coarse linen of unbleached color; I think it is not more than thirty-seven and one half cents per yard. A yard is plenty for a bag. By measuring around the ends you can cut out the main part of the bag. Allow a good lap-over where it is to be buttoned. A good size is about eighteen inches wide. The round ends and the edges of the bag which are to be joined are bound with dark brown dress braid and worked in briar stitch with old-gold crewel. I put an outline picture on each end; on one a girl chasing a butterfly—fit emblem for a traveling-bag—and on the other a bunch of flowers. An outside pocket was bound and stitched with the old gold and then stoutly sewed to the main part of the bag with the sewing-machine. This pocket is decorated with my initials in cross stitch worked with dark brown crewel.

Instead of a shawl-strap, as in the illustration, I have a handle of the linen, double bound and stitched on with the machine. Finally, the ends are sewed in by hand, neatly uniting the ends of the bag with the round ends, to which they fit exactly. That bag has traveled miles and miles, and held many garments which made me neat and comfortable. It is almost incredible how much such a bag will hold, and the tighter it is packed the better it looks. So many of my friends have admired mine and wished for one like it, that I think I have made a dozen or more to give away. If you make one, I can wish you no better luck than that it and you may have as many fine jaunts as I have had with mine.

KATE KAUFFMAN.

## KNITTED HOSE SUPPORTERS.

Many like the shoulder hose supporters, but think them rather expensive to buy. Make them yourself. Take white carpet-warp or cord that they use at stores for tying packages, and two knitting needles. Cast on 14 stitches and knit back and forth plain until you have a strip one yard long. Knit another the same length, and one strip 4 inches long. Two strips of 8 stitches each should be 12 inches long. Double the first two strips at A, so that a single end below is left 8 inches long. To each of these, at B, sew on a strip of elastic ribbon, 9 inches in length, and hem the lower edges. About 7 inches above A, sew the 4-inch strip to each loop; this goes across the back and holds the loops from slipping off the top of the shoulders onto the arms. Each narrow strip is put through the loop to a small-sized pants buckle, at C, and the four ends sewed to any hose fasteners that you may be lucky enough to have left from some worn-out supporters. If you cannot get these, knit button-holes in each end and put two buttons on each stocking top, one at each side.



CROCHET GROUND PATTERN FOR SOILED LINEN BAG.

given some responsibility, yet great care must be exercised that too heavy work is not given to the young and growing girl. Many mothers, without thought of doing wrong, put the care of young children on the eldest daughter, although she is only ten or twelve years old. The fretful, teething baby must be kept quiet, and sister lifts and carries him until arms and

ment to her dress of foliage! We may feel sure this invention materialized during the youth of Cain and Abel, if not before.

The most primitive dress of hunter or other sportsman included a pouch for his convenience. Even before handkerchiefs were owned by individuals, but when one was "passed around" for general use, the pocket was part of the dress.

## MAIDA MCL.

## BAG AND BAG-GAGE.

Mother Eve must have seen the advantage a pocket would be, what a necessary part of a garment, what an improvement

to her dress of foliage! We may feel sure this invention materialized during the youth of Cain and Abel, if not before.

The traveling-bag illustrated is quite elaborate, and one would need to begin to make it at Christmas in order to be ready for a trip in August. Let me tell you about one I made in two days; it is the shape of the one here given, the circular ends being about eight inches in diameter. I do not run umbrellas through mine; the ends are plain, whole circular



CROCHET BAG FOR SOILED LINEN.

Button-holes are made thus: Knit half across the strip, and put the rest of the stitches on a third needle. Knit the half as long as you wish the button-hole to be, then leave that side and take up the other half and knit same number of times across as the first, then knit across the whole width as usual, for two or three times, and bind off. The button-hole should be worked to make it strong. The elastic on

the upper part of the hose supporter is buckled onto the lower part, drawing it through as much as necessary to fit the person and length of stockings. The directions given would fit a medium-sized person. The strips should be shorter for a child.

Silk elastic ribbon is really the cheapest, as it lasts so much longer than the cotton.

People who have never worn this style of hose supporters think them a regular harness at first, but just try them awhile and you never will want any other kind. These are so much healthier than the straps, which have to be tight enough to injure the circulation if they hold the stocking properly. Especially is this true of the little ones, whose growing limbs are sometimes creased fearfully, because the proud mother will keep the stockings up, at whatever cost of ease to the child.

Don't do it! It is cruel to deform the little limbs in that style. Use the shoulder supporters and you can draw the stockings up to the body, if you wish, without any injury to the little limbs or to the circulation.

GYPSY.

## PINEAPPLE LACE.

TERMS USED: Sh, shell; d c, double crochet; ch, chain; tr, treble; 1 tr, long treble; st, stitch.

Make a chain of 36 stitches.

First row—Sh, (3 tr, ch 1, 3 tr) in sixth st of foundation ch, ch 6, sh in 15th st of ch, ch 6, sh in 24th st, ch 5, 1 d c in 28th st, ch 3, sh in 32d st, 1 tr in 36th, ch 4; turn. The d c's are all under the loops of 3 or 5 chains, and only one sh in each sh of the following rows.

Second row—Sh, ch 1, 1 d c under first 3 ch, ch 5, 1 d c under 5 ch, ch 5, sh, ch 5, 9 extra long tr in next sh, ch 5, sh, ch 3; turn.

Third row—Sh, ch 5, 1 d c in first 1 tr, \* ch 3, 1 d c, repeat from \* 8 times; ch 5, sh, ch 5, 1 d c, ch 5, 1 d c, ch 3, sh, ch 1, 1 tr under 5 ch, ch 4; turn.

Fourth row—Sh, ch 1, \* 1 d c, ch 5; repeat from \* 3 times; sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 7 times; ch 4, sh, ch 3; turn.

Fifth row—Sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 6 times, ch 4, sh, ch 5, 1 d c, ch 3, sh in second loop of 5 ch, ch 3, 1 d c, ch 3, sh, 1 tr, ch 4; turn.

Sixth row—Sh, ch 1, 1 d c, ch 5, 1 d c, ch 1, sh, ch 1, 1 d c, ch 5, 1 d c, ch 5, sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 5 times, ch 4, sh, ch 3; turn.

Seventh row—Sh, ch 4, 1 d c, \* ch 3,

ch 3, 1 d c, ch 4, sh, \* ch 5, 1 d c, repeat from \* 3 times, ch 3, sh, ch 3, 1 d c, ch 3, sh, 1 tr, ch 4; turn.

Tenth row—Sh, ch 1, 1 d c, ch 5, 1 d c, ch 1, sh, ch 1, \* 1 d c, ch 5, repeat from \* 4 times, sh, ch 4, 1 d c, ch 3, 1 d c, ch 4, sh, ch 3; turn.

Eleventh row—Sh, ch 4, 1 d c, ch 4, sh, \* ch 5, 1 d c, repeat from \* 4 times; ch 3, sh, ch 3, 1 d c, ch 3, sh, 1 tr, ch 4; turn.

Twelfth row—Sh, ch 1, 1 d c, ch 5, 1 d c, ch 1, sh, ch 1, \* 1 d c, ch 5, repeat from \* 5

ch 3, sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 6 times, ch 4, sh, ch 5, 1 d c, ch 3, sh in second loop of 5 ch, ch 3, 1 d c, ch 3, sh, 1 tr; turn.

Sixth row—Sh, ch 1, 1 d c, ch 5, 1 d c, ch 1, sh, ch 1, 1 d c, ch 5, 1 d c, ch 5, sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 5 times; ch 4, sh, ch 3, 1 d c, ch 3, sh, 1 tr; turn.

Seventh row—Sh, ch 1, 1 d c, ch 5, sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 4 times; ch 4, sh, ch 5, 1 d c, ch 5, 1 d c, ch 3, sh, ch 3, 1 d c, ch 3, sh, 1 tr; turn.

center of a salad-bowl with a border of the vegetables around. Mix two tablespoonfuls of mayonnaise dressing with a little vinegar and pour over the salad.

PLAIN CHICKEN SALAD.—Take a large head of lettuce, tear the leaves apart and put in a salad-bowl. Cut up the remains of a cold chicken, put over the lettuce, pour over a plain or mayonnaise dressing as desired. Garnish with hard-boiled eggs and fresh lettuce leaves or slices of boiled beets. Set on ice and this salad will keep a day or two, and be in readiness for lunch or tea.

FRESH BEEF SALAD.—Take one pound of boiled beef (left from dinner), cut in thin, narrow strips, put in a salad-bowl with a plain dressing. Mince celery and put over, season with salt and pepper. Garnish with fresh lettuce leaves.

LAMB SALAD.—Wash and dry two crisp heads of lettuce, tear the leaves apart, put them in a salad-bowl and arrange neatly. Cut up half a pound of roast lamb, put over the lettuce; chop one large cucumber pickle and put over, pour in a plain salad dressing. Garnish with hard-boiled eggs.

SWEETBREAD SALAD.—Soak two sweetbreads in cold water two hours, boil them ten minutes. When cold, cut in slices, lay in the center of a salad-bowl, put a border of lettuce leaves around, pour a mayonnaise dressing over.

BACON SALAD.—Cut half a pound of breakfast bacon in slices, then in small pieces, fry a light brown, remove the pan from the fire and add half a cup of vinegar to a cup of the bacon grease; have half a pound of chopped ham laid on a bed of lettuce in a salad-bowl, pour the bacon dressing over.

BEET SALAD.—Bake three medium-sized beets and boil three celery roots; cut these in slices, put in a salad-bowl with lettuce leaves, pour over a plain salad dressing. Garnish with sliced cucumbers.

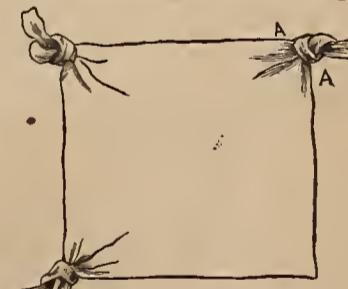
FARMER'S BREAKFAST SALAD.—Scald two ripe tomatoes, peel off the skin and put them on ice, drain and slice thin. Peel and slice thin one large cucumber, put in a salad-bowl, lay over the tomatoes; cut up one young onion, sprinkle on top and cover with plain salad dressing.

ELIZA R. PARKER.

## CLOTH COVER FOR MILK-PANS.

Will try to describe how to make a cloth cover for milk-pans.

Take a square piece of cloth about three inches wider than the top of the pan; tie a knot in three corners of the cloth, hold the fourth corner, without a knot, in the right hand, and with the left hand put the cover on the pan; twist the fourth corner from you until the slack is taken out and the cloth fits tight around the pan. Now form a letter 1 of the twist corner, and with the left hand hold the point of



CLOTH COVER FOR MILK-PANS.

the twist, and with the right hand forefinger and thumb press the top of letter 1 down and then up under the cloth, which holds the cloth on firm and fast and without a wrinkle in the top; when removed, pull on point of twist. When tying knots, place the edges A and A together, which leaves the cloth in a cupping shape.

A DEEP-SEATED COUGH cruelly tries the Lungs and wastes the general strength. A prudent resort for the afflicted is to Dr. D. Jayne's Expectorant, a remedy for all troubled with Asthma, Bronchitis, or any Pulmonary Affection.

## WALL PAPER BARGAINS!

We will guarantee all these clean new goods just made, and full length—8 yards to the roll.

An 8-yd. roll White back Paper, 3 to 6c.

An 8-yd. roll Gilt Paper, 5 to 10c.

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Gilt Borders, 4 to 18 inches wide, 2 and 3c. per yard.

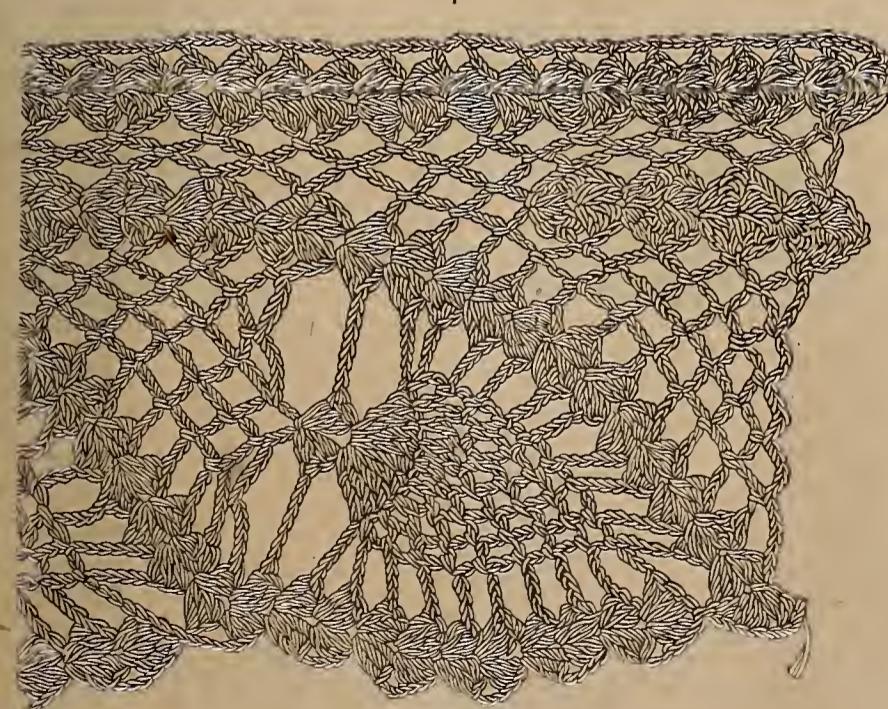
Borders without Gilt, 2 to 9 inches, 1c. per yard.

Send 4c. in stamps for samples of the best and greatest bargains in the country.

F. H. CADY,

305 HIGH STREET, Providence, R. I.

Mention this paper.



PINEAPPLE LACE.

1 d c, repeat from \* 4 times, ch 4, sh, ch 5, 1 d c, ch 5, 1 d c, ch 3, sh, ch 3, 1 d c, ch 3, sh, 1 tr, ch 4; turn.

Fourth row—Sh, ch 1, \* 1 d c, ch 5, repeat from \* 3 times; sh, ch 4, 1 d c, \* ch 4, 1 d c, repeat from \* 7 times, ch 4, sh, ch 3, sh, 1 tr, always ch 4 at end before; turn.

Fifth row—Sh, ch 1, 1 d c, ch 5, 1 d c,

sh, ch 5, 1 d c, ch 5, 1 d c, ch 3, sh, 1 tr, ch 4; turn.

Eighth row—Sh, ch 1, 1 d c, ch 5, 1 d c, ch 1, sh, ch 1, \* 1 d c, ch 5, repeat from \* 3 times; sh, ch 4, 1 d c, \* ch 3, 1 d c, repeat from \* 3 times; ch 4, sh, ch 3; turn.

Ninth row—Sh, ch 4, 1 d c, ch 3, 1 d c,

## Our Sunday Afternoon.

## FALSE PROMISE.

**P**AINTHOU the infant Christ," the abbot said;  
And to the youthful artist forth they brought  
A lovely child, angels a fairer head  
'Mid heavenly cherubim had vainly sought  
Ere long, immortal, on the canvas bright  
Shone that sweet face of innocent delight.

From his pure brow celestial radiance beamed;  
Beneath his eyes the sinful heart grew dumb,  
Such loving, tender eyes, that ever seemed  
Wondering, yet prescient of the grief to come.  
Within those thoughtful depths one yet might  
trace

The promise of the healing of the race.

Long years had passed, the artist famous  
grown,  
With deeper knowledge, had expressed the  
wish  
To paint that last sad supper, where is shown  
The fell betrayer's fingers in the dish.  
As one the Judas fit to represent  
A murderer, chained, was from the galleys  
sent.

Sullen he stood, while from his faintive eye  
Gleamed all the evil passion of the soul:  
Shuddering, the painter wrought, regretfully,  
Thoughts of that earlier labor o'er him stole,  
When, as the sin-seamed features he did trace,  
Aghast, he saw it was the self-same face.

A child to you is born, before life's mystery  
Pause and be dumb. Ye know not what may  
be.

—The Academy.

## HE BLAMED THE WATER.

**F**ARMER drove up to our mill door with a grist. He had a fine team of horses, but was a sickly, meagre-looking creature. As he handed out his sacks of wheat, he came to a water-bucket half filled with apples.

"Here, boys," said he, as he passed the pail to the miller, "would you like some apples? I never eat them myself."

I asked him why, and he replied that they always made him sick. So the half dozen hands about the mill soon devoured the ripe, golden fruit with a relish, for they had been taught that nothing was more nutritious than a good, ripe apple. I asked the man, who so kindly gave us what he could not use himself, why he thought he could not eat of the fruit. His answer was that they distressed him, but upon further inquiry I found that everything he ate distressed him to a greater or less degree. When asked what he lived upon, he said:

"Principally salt meat, sausage, eggs and white bread. But," said he, "the water is bad where I live, and I guess my only resource for better health is to sell out and move away."

Noticing his sleek-looking horses, I remarked: "Do your horses drink the same water?"

"Oh, yes," said he. "They have no other."

"I see you use tobacco pretty freely," I remarked.

"Oh, yes. I couldn't live without that."

"But," said I, "your horses seem to thrive on the water. Do you think if they had to chew the tobacco that you do, and live on your diet, they would thrive, or would the water make them sick, too?"

—Insurance.

Amused at the conversation, which she could not help overhearing, the lady turned around and said to the boy:

"It always pays to be polite, my boy; remember that."

Years passed away, and last December, when doing her Christmas shopping, this lady received an exceptional courtesy from a clerk in Boston, which caused her to remark to a friend who was with her:

"What a great comfort to be civilly treated once in awhile—though I don't know that I blame the store clerks for being rude during the holiday trade."

The young man's quick ear caught the words, and he said:

"Pardon me, madam, but you gave me my first lesson in politeness a few years ago." The lady looked at him in amazement, while he related the little forgotten incident, and told her that the simple "thank you" awakened his first ambition to be something in the world. He went the next morning and applied for a situation as office boy in the establishment where he was now an honored clerk.

Only two words dropped into the treasury of a street conversation, but they yielded returns of a certain kind more satisfactory than investments, stocks and bonds.

## WATCH ALWAYS.

A young lady whose parents had died while she was an infant, had been kindly cared for by a dear friend of the family. Before she was old enough to know him, his business took him to Europe. Regularly he wrote to her through all his years of absence, and never failed to send her money for all her wants. Finally, word came that during a certain week he would return and visit her. He did not fix the day or the hour. She received several invitations to take pleasant trips with her friends during that week. One of those was of so pleasant a nature that she could not resist accepting it. During her trip he came, inquired as to her absence, and left. Returning, she found this note: "My life has been a struggle for you; might you not have waited one week for me?" More she never heard, and her life of plenty became one of want.

Jesus has not fixed the day or hour of his return, but he has said "Watch," and should he come to-day, would he find us absorbed in thoughtless dissipation?—Christian Alliance.

## THE DEADLY TAPEWORM.

More defalcations, more failures, more banks burst wide open, more cashiers and trusted managers gone to parts known but non-extraditing. What's the matter? Tapeworm, that's just what it is! That narrow strip of paper that endlessly uncoils and glides out from under the ticker! Sooner or later, it fetches them all. If we had a controlling or influential interest in an insurance company, and any one connected with it and having access to its cash drawer, or its bank account, or its convertible securities, should be found hanging over one of these clicking devices of the devil, listening to its lies about fortunes made in a day, that fellow, whether he was president or errand boy, should be bounced! Nobody who is fed upon by this deadly parasite, the tapeworm of the stock indicator, ought for a single day to be suffered to hold a place as custodian of other people's money.

—Insurance.

## IN ONE BUSHEL OF CORN.

This is how some one figures it out: From a bushel of corn a distiller gets four gallons of whiskey, which retails at \$16; the government gets \$3.60, the farmer who raised the corn gets 40 cents, the railroad gets \$1, the manufacturer gets \$4, the retailer gets \$7, and the consumer gets drunk. No wonder so many Kansas farmers are using corn as fuel.—New York Tribune.

## PHYSICIANS ACKNOWLEDGE THERE IS LESS DEAFNESS.

Physicians have watched with a jealous eye the increasing popularity of the sound discs invented by H. A. Wales, of Bridgeport, Conn., as patients who have been under their care for years have in a week's time had their hearing restored by its use, and they acknowledge that there may be a decrease in the percentage of deaf people in the Census of 1890.

"Crack! d'ye hear that?" said the boy to a companion standing near by.

"No. What?"

"Why, that lady in sealskin said 'thank ye' to the likes o' me."

## GREAT OFFER!

## PIANOS! • \$35. • ORGANS!

Direct from the Factory at Manufacturer's Prices. No such offer ever made before. Every man his own agent. Examine in your home before paying. Write for particulars. Address THE T. SWOGER & SON PIANOS & ORGANS BEAVER FALLS, PENNSYLVANIA.

From Rev. James H. Potts, D. D., editor of Michigan Christian Advocate, Detroit, Mich.: "To say we are delighted with the Piano does not express the fact. We are jubilant. If all your instruments are as fine in appearance and as pleasing in tone as this one, your patrons will rise by the hundred."

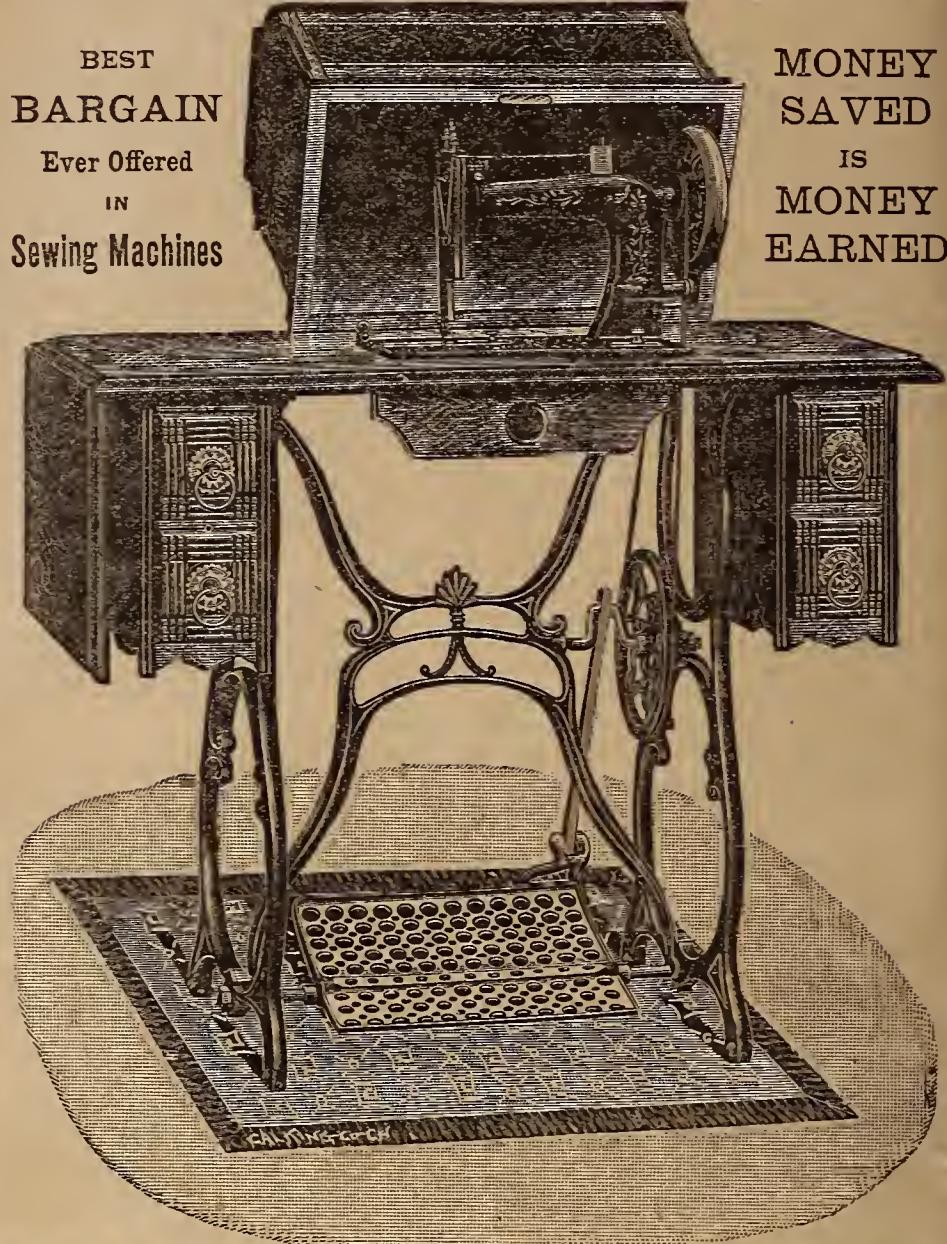
From Rev. H. P. Dudley, pastor M. E. Church, Des Moines, Iowa: "The Piano is in every way satisfactory."

From S. A. Johnson, Beaver Falls, Pa.: "I have had a T. Swoger & Son Organ three years. It gives the best of satisfaction."

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Ever Offered  
IN  
Sewing Machines



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SAVED  
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MONEY  
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## A \$45.00 Sewing Machine for \$14

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For several years our readers have exclusively enjoyed the special privilege of obtaining good Sewing Machines at the low prices named. The success that has followed these machines, and the great satisfaction they give to purchasers, warrants us in saying that the Chicago

## SINGER SEWING MACHINE

Is the best machine in the world for the money. We desire to please our readers and to save them all the money possible, and in these machines give them all of the middlemen's profits.

This machine is made after the latest models of the Singer machines, and is a perfect fac-simile in shape, ornamentation and appearance. All the parts are made to gauge exactly the same as the Singer, and are constructed of precisely the same materials.

The utmost care is exercised in the selection of the metals used, and only the very best quality is purchased. Each machine is thoroughly well made and is fitted with the utmost quietness and exactness, and no machine is permitted by the inspector to go out of the shops until it has been fully tested and proved to do perfect work, and run light and without noise.

The CHICAGO SINGER MACHINE has a very important improvement in a Loose Balance Wheel, so constructed as to permit winding bobbins without removing the work from the machine.

The Loose Balance Wheel is actuated by a solid bolt passing through a collar securely pinned to the shaft outside of the balance wheel, which bolt is firmly held to position by a strong spiral spring. When a bobbin is to be wound, the bolt is pulled out far enough to release the balance wheel, and turned slightly to the right or left, where it is held by a stop-pin until the bobbin is filled. Where the machine is liable to be meddled with by children, the bolt can be left out of the wheel when not in use, so that the machine cannot be operated by the treble.

The thread eyelet and the needle clamp are made SELF-THREADING, which is a very great convenience.

Each Machine, of Whatever Style, is Furnished with the Following Attachments:

1 FOOT HEMMER.	6 HEMMERS, all different widths.	1 SCREW-DRIVER.
1 FOOT RUFFLER.	1 WRENCH.	1 GAUGE.
1 TUCKER.	1 THREAD CUTTER.	1 GAUGE SCREW.
1 PACKAGE OF NEEDLES.	1 BINDER.	1 OIL-CAN, filled with Oil.
1 CHECK SPRING.	5 BOBBINS.	1 INSTRUCTION BOOK.
1 THROAT PLATE.		

The driving wheel on this machine is admitted to be the simplest, easiest running and most convenient of any. The machine is self-threading, has the very best tension and thread liberator, is made of the best material, with the wearing parts hardened, and is finished in a superior style. It has veneered walnut cover, drop-leaf table, 4 end drawers and center swing drawer.

## THE MANUFACTURERS WARRANT EVERY MACHINE FOR FIVE YEARS

For \$14. Premium No. 120 is the low-arm Chicago Singer Sewing Machine, and is offered, together with this paper one year, for only \$14. Or, it is given free as a premium for 60 yearly subscribers to this paper; or for 30 yearly subscribers and \$7 additional.

For \$17. Premium No. 486 is the high-arm Chicago Singer Sewing Machine, and is offered, together with this paper one year, for only \$17.

Both of the above machines are alike in all particulars, and each have the same attachments, except that No. 486 has a high arm, while No. 120 has a low arm. In most families the low-arm machine will do as well as the other; but those who do a good deal of dressmaking, and sewing of large garments, will find it most convenient to have the additional space afforded by the high arm.

The machine is sent by freight, receiver to pay freight charges, which will be light. Give name of freight station, if different from your post-office address.

Address FARM AND FIRESIDE, Philadelphia, Pa., or Springfield, Ohio.

## Our Farm.

## THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammonton, New Jersey.

## HOW MUCH TO FEED.

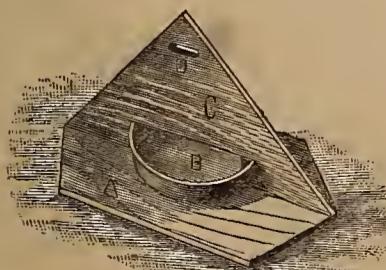
WE have before stated, it is impossible to suggest a certain quantity of food for any number of fowls, for the reason that no two breeds are alike in their desires, nor are any two fowls of any one breed alike. If you feed in a trough, give the hens all they will eat up clean. You can easily learn how to regulate the quantity by watching the hens. As each hen eats her fill she will walk off. When the last hen leaves you will then know just how much they can eat, if you give them all they wish. But it is on that point that so many are liable to make mistakes, as it is not wise to allow hens to eat all they desire, unless in the winter, and about the time they are going to roost. If the hens can eat as much as they wish, they will not be interested in searching for more food, and will consequently become sluggish and fat. Hens should be made to exercise. They will thrive better and lay better when they are compelled to work and find their food than when overfed. More harm is done by overfeeding than by not allowing enough, and where the hens have a good range they will need little or no help from the granary, as they can find more than they can eat in a day.

## WHOLESALE LICE KILLING.

There is one plan of killing lice on poultry that never fails. Make a tub of strong soapsuds, and use good whale-oil soap or carbolic-acid soap. Select a warm day, and have your suds warm. Take each fowl, and immerse it in the suds, head and all, but do not stop with simply dipping the fowl, but rub the suds well into the feathers. In other words, give the bird a good washing, so that the suds may reach the skin. Do not be afraid to dip the head under, and saturate the neck feathers. Turn the birds loose in a yard where there is no shade and the sun will soon dry them off. Now add two quarts of kerosene to your suds, first making an emulsion with plenty of soap, and sprinkle the suds over every part of the poultry-house, floor, roosts, ceiling, sides, and, in fact, every place where a louse could hide, and your fowls will be free of the pests. The roosts should be well saturated with pure kerosene. Burn all the material in the nests, saturate the boxes with the suds, make new nests, and then repeat the process once a month.

## A DRINKING FOUNTAIN.

Mr. A. P. Greim, Tomkin's Cove, N. Y., sends a description of a novel and handy drinking fountain, which he describes as follows: "Here is the cheapest, and in my opinion the best, drinking fountain, and so simple that any one can make it. First, procure a pan or dish the size required (mine is an oval-shaped soap-dish), and then cut a board (of any size you wish) the shape of No. 1 (see illustration), and another the shape of No. 2. You may now fit the pieces together by nailing No. 1 on the dotted line of No. 2, and place the dish or pan in position. In



A DRINKING FOUNTAIN.

the illustration, A shows No. 2, C shows No. 1 (in position), B is the dish, and D shows where a hole may be cut for a handle. This fountain may be carried anywhere, it will not upset, the chicks can drink from either side, they cannot soil the water, and they cannot get on the pointed top.

## EATING ON THE GROUND.

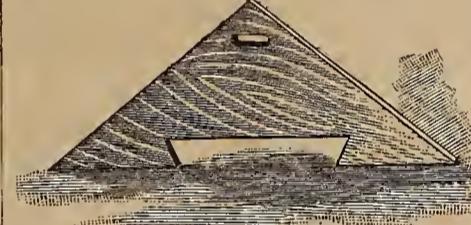
It is only proper that grains should be scattered over the ground, far and wide, for the hens to hunt and find them, as the feed-trough, so far as the feeding of grain is concerned, does more harm than good, the hens not being induced to work if they can walk up to the trough and eat whenever they wish; but when soft food is given it should always be in the trough, as a large portion will be wasted if thrown on the ground. The waste of grain, when ground and moistened, is very large, and as it soon begins to ferment if the season is warm, it assists to invite disease in the flock. As soon as the fowls have finished their meal the food should be removed and the trough cleaned. It is always better to feed but once a day in summer, as the fowls do not need as much at that season as in winter, and the feeding places should be cleaned off occasionally. Ducks should not be fed at the same place longer than a week before changing location, as they create filth rapidly and cause a disagreeable odor.

## THE BEST KIND OF POULTRY-HOUSE.

We can only give the best house by submitting designs from time to time. There is no best poultry-house. The house that may be accepted by one as the best may be rejected by another. We can simply submit the different designs, leaving the reader to judge of the kind best suited for his purpose. Climate, breed of fowls, cost, convenience and other matters become factors in making a selection. No two families will agree on the same plan as the best for a dwelling house, and in selecting a design for a poultry-house the same difficulty presents itself.

## WYANDOTTE AND BRAHMA CROSS.

An experiment made by crossing the White Wyandotte and Light Brahma, the past season, resulted in the production of pullets possessing the small comb of the Brahma and a more active bird, the Wyandotte characteristics predominating. The Wyandotte male was used with



No. 1.

Brahma hens. The feathers on the legs still remain, but they are few. As layers they bid fair to be superior, but for market and the table they are equal to any other cross made. Next season, the pullets will be mated to an Indian Game male for purposes of experiment.

## SUNFLOWER SEEDS.

Save your sunflower seeds for your early moulting hens, as they are the best food you can provide them. Sunflower seeds will not be eaten readily by some kinds of poultry at first, but by allowing nothing else the hens soon become accustomed to them and seek them. The seeds contain a large proportion of oil, which greatly aids the moulting hens. It should be the object to assist the early moulting hens in every possible way, as they will be the best and most productive winter layers when eggs are usually scarce.

## MEAT FOR EGGS.

This is an appropriate time for feeding meat to laying hens, as the hens will lay in summer when they will lay at no other time. They cannot always secure a full supply of insect food, and nothing will stimulate them to renewed effort sooner than a mess of lean meat three times a week. The increased number of eggs will more than pay for the meat.

## LIME ON THE FLOORS.

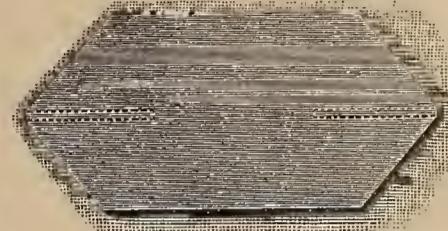
Lime will detract from the value of the droppings, but it is the best preventive of roup and gapes known. Where lime is freely scattered over every portion of the poultry-house, and over the yards, there will be fewer diseases, while lice do not fancy its presence and get away from it as fast as possible.

## TURPENTINE FOR ROUP.

Spirits of turpentine has been used as a remedy for roup with excellent results. It is given in half teaspoonful doses, once a day, mixed with sweet oil or cotton-seed oil, in the proportion of one part turpentine to two of the latter. It is also excellent when used as an ointment for swelled heads or eyes, and is one of the best remedies for gapes, a few drops only being necessary for chicks. It will also prevent lice if freely used on the roosts and over the floor and walls of the poultry-house.

## BRAN AND BONE MEAL.

Bran and bone meal are rich in the phosphates, and hence are among the best foods that can be used for growing stock. Bran may be fed by mixing it with any kind of food, especially potatoes or turnips, and young ducks fed on it grow



No. 2.

rapidly. Bone meal may be placed in some location where the fowls of all ages can have free access to it, as they will only eat what they require of it. A cigar-box, filled with it and placed in the poultry-pan, will be all that is needed in the way of providing it.

## LIVE FOWLS IN COOPS.

The great desideratum in the coop is water. We venture to say that more fowls die on the journey to market for want of water than from any other cause, and something more than one drinking cup should be placed in the coop. The fowls at one end of the coop have no way of knowing that a cup is at the other end, and as they have but one desire—liberty—are not inclined to search for anything else. They lose flesh, arrive in market out of condition, and do not bring the best prices, simply because not enough water-cups are provided.

## TOBACCO DUST IN NEST BOXES.

The refuse tobacco sweepings from cigar or tobacco factories is an excellent article to use in the nests. The sitting hens, which are compelled to remain on the nests for three weeks, provide inviting places for the breeding of lice, but by the free use of refuse tobacco, this may be prevented. A decoction of tobacco is also excellent for use in sprinkling over the interior of the poultry-house, and a thorough dusting with very fine tobacco dust is nearly equal to insect powder in effect.

## DUCKS AND GREEN FOOD.

The duck is thickly covered with soft feathers, and feels the effect of warm weather more than chickens. They will not thrive if they have no shade, and when very warm are easily affected with cramps if they drink too much cold water, which kills them in a short time. Nor should ducks have much grain at this season. Plenty of green food is better, and as the duck is not dainty, it will eat all kinds of grass and nearly all kinds of weeds. Bran and potatoes should be used in place of a feed of ground grain.

## OATS IN SUMMER.

Oats make the best food for summer if grain is allowed. Some object to oats, claiming that they cause crop-bound, but this is not true. Injury may have been the result when fowls could get no grit, but no harm will result from feeding oats when plenty of sharp grit is supplied. Oats are not as fattening as corn or wheat, and should be used at this season of the year.

## CORRESPONDENCE.

PURE BREEDS.—My decided opinion is that, in intrinsic value, the single-comb Brown Leghorn is the best of all the American breeds, especially if size, as well as number of eggs, be taken into consideration. The great trouble with breeders of this variety is, that they are losing their size by too much inbreeding and mating of small specimens. While we do not

object to a certain amount of inbreeding to establish a certain color of plumage, etc., we do think it very injurious to a flock to do too much of it, as they diminish in size by so doing. We frequently have hens to weigh five and six pounds, and they possess all the standard requirements, such as good, creamy, white lobes, good plumage, a deep, rich yellow leg, evenly serrated combs, and which manage to take a front seat wherever they are exhibited. I would urge upon breeders to endeavor to improve the color as much as possible. I find in many yards that I have visited, a tendency to run into much striping on the back, with a gray cast all through, similar to the back of the Silver-gray Dorking. A good, even color is much more difficult to obtain than the white lobe so much sought after. If you have any desire to show your stock, you must be careful how you mate your pen; therefore, a few hints from an old breeder, and lover of these fowls, won't be amiss. For cockerel breeding, take a good, healthy, bright-colored cock, having good ear-lobes, and that has been bred from stock noted for good lobes (good lobes are more difficult to obtain in males than females), and mate him with evenly-colored hens with good combs, good-shaped birds and not to low in station. If the cock bird carries himself proudly, and holds his tail too high, select hens that carry their tails rather low, with well-striped hackles. This mating should produce fine cockerels. The result of mating depends upon you. For pullet breeding, mate the lighter-colored hens with a darker-colored male, with good lobes, etc. The color I recommend for cockerel breeding is the color for the show pen, and when I say bright, I do not mean a lemon-colored hackle and flesh-colored legs, with wings well splashed with brick color. What is more beautiful on a lawn, a farm or a city lot (for these birds will thrive under any conditions) than a flock of Brown Leghorns. They consume less food, are good foragers, and if left alone at this season of the year, will find their own living. The young cockerels make fine broilers, their meat being sweet and juicy (not stringy, like the Asiatic breeds), they are hardy, and as egg-producers they outlay any breed of fowls on the earth that we have ever heard of. Some object to their flying. I find no trouble in keeping them confined in a yard with a six-foot fence, and after the pullets are one year old, they seldom, if ever, attempt to fly over any fence if given any chance at all to a run now and then. These birds want green food, plenty of grit, and pure, fresh water. We have a farm of twenty-three acres and over 2,000 feet of henry devoted to this especial breed, of which they get the full benefit.

B. F. F.

Hammonton, N. J.

## INQUIRIES ANSWERED.

**Feather-Eating.**—J. F. P., Bayonne, N. J., writes: "Please give a cure for feather-eating among hens. My hens are almost void of feathers on backs and sides."

**REPLY:**—It is a vice due to confinement and idleness. There is no cure other than to separate the fowls from each other or to watch and discover the ones that pick the others.

**Swelled Eyes.**—Mrs. R. O. B., Strong, Kan., writes: "My fowls go blind, a substance forms in the eyes and also in the throats. They become very poor and die."

**REPLY:**—It is a form of roup, due to draughts over them at night. Wash the eyes with a warm solution of a teaspoon of boric acid in a gill of water, wipe dry, and anoint with a drop of a mixture of spirits turpentine and sweet oil. Also, give each fowl half a teaspoonful of the turpentine mixture once a day.

**SAVE YOUR MONEY.**—We will send *FAIR-POULTRY*, the best poultry paper, six months for 25 cts.; or for 15 cts. if you mention this paper. I. S. JOHNSON & CO., Box 2113, Boston, Mass.

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If afflicted with sore eyes use Dr. Thompson's Eye-Water

## Queries.

## READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should enclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query, in order that we may answer by mail if necessary. Queries must be received at least two WEEKS before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

**Tools.**—J. E. S., Garden City, Mo. For tools, write to the Standard Tool Company, Athol, Mass.

**Machinery for Cannery.**—J. B. M., Petersburgh, Ind. You can get a complete outfit for a cannery from Merrell & Soule, Syracuse, N. Y.

**Schools of Telegraphy.**—M. A. D., Red Bank Furnace, Pa. Telegraphy is taught in many business colleges. Address the colleges you see advertised for catalogues, which will give you full information. You can get a list of all the business colleges in your state by writing to the Secretary of State, Harrisburg, Pa.

**Divining Rods.**—P. C. S., Anthony, Fla., writes: "If you have an instrument for finding buried money, please send me a description and price. If not, send me the address of some dealer who has."

**ANSWER:**—There is no such instrument. The popular notion about it is a relic of superstition. If a man had such instruments, he would use them himself for finding money, instead of selling them.

**License for Stationary Engineers—Books for Engineers.**—N. Y. B., Cherry Valley, Ohio. A statute of Ohio provides: "That in all cities and villages, the city or village council may provide, by ordinance, for the examination, regulation and licensing of stationary engineers, and others having charge or control of engines, boilers or steam generating apparatus, within the corporate limits of such cities." Unless your village council has passed such an ordinance, no license is necessary. You can get books on steam engineering from the D. Van Nostrand Co., New York City.

**Johnson Grass.**—W., Jackson, Tenn., writes: "(1) Will Johnson grass germinate readily if sown like other seed? (2) When is the best time to sow it? (3) Will it stand our Tennessee upland soil and dry summers? (4) Would it thrive on bottom land, where it would be well shaded? (5) Has any one got tired of it? (6) How long will it thrive on suitable soil if mown before it seeds?"

**ANSWER:**—(1) Johnson grass may be propagated by pieces of root-stocks, or by seeds. The seeds start slowly, and require warm weather. (2) Spring. (3) It will stand great heat and severe drought, and we think it would do well on your uplands, if the soil is suitable. We would be glad to have some of our readers, who have raised Johnson grass, answer this question, and also the fourth. (5) Yes. (6) It is a perennial, and is difficult to destroy on account of its many, strong root-stocks, every joint of which will send up a stem. It may be cut frequently during the growing season; once a month, some years.

## VETERINARY.

Conducted by Dr. H. J. Detmers. Veterinary of the Ohio Agricultural Experiment Station, and Professor of Veterinary Surgery in Ohio State University.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should enclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two WEEKS before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 35 King Avenue, Columbus, Ohio.

**Warts on Cow's Teats.**—G. W. G., Hillsdale, Pa. If the warts complained of have a neck, it may be best to ligature every one of them; and if they are sessile—that is, flat and without a neck—you may, once a day, apply to them a dose of some vegetable acid, citric acid, for instance.

**Shoulder Boil.**—H. J., Manayunk, Pa. An old shoulder boil (fibroid) can, as a rule, be removed only by a surgical operation, which, of course, requires a surgeon to perform it. But after the operation has been performed, it will require some time until a healing is effected, and then, unless the collar is carefully adjusted, the scar remaining behind may become about just as troublesome as the tumor itself. Hence, unless the animal is young and otherwise valuable, it may be just as well to leave the tumor alone.

**Bunches on the Neck.**—F. G. L., Chautauqua, S. Dak., writes: "What ails my colt? He is one year old, and has been in the pasture ever since the grass was large enough. Some time ago I noticed some bunches along the left side of the neck. They broke, and a kind of yellow matter runs from them."

**ANSWER:**—I cannot tell you what ails your colt, unless you make a thorough examination and report the particulars. There are too many possibilities. So, for instance, if your colt has been exposed to an infection with glanders, it may be farcy.

**Soft Feet.**—A. J. S., Dillon, Ohio, writes: "Please inform me what to do for my horse's soft feet. I have not worked him this summer, and his feet are so soft or brittle that the shoes will not stay on."

**ANSWER:**—Keep the hoofs of your horse clean and dry; at any rate, do not allow the animal to stand in mud and manure, which, of course, will be absorbed, and will have a morbid influence upon the horn of the hoof. The latter, therefore, if it becomes dry after it has been soaked with manure, will become brittle. If you have a good, dry pasture, let your horse have the benefit of it.

**Has a Remedy for Heaves.**—J. C. R., Middlebury, Ohio, writes: "Will you please send me the names of the authors of the two queries inclosed? I have a horse which had the heaves. I have helped her greatly, and would like to correspond with the two referred to."

**ANSWER:**—I cannot accommodate you, because I do not keep all the names on file. If, however, you can restore to health a horse affected with heaves, you can do more than any other man, living or dead, ever could; in fact, you can make an impossible thing possible. Why do you not publish your treatment, and become renowned? Or, else, if you desire

## MADAME ROWLEY'S TOILET MASK

## OR FACE GLOVE.

The following are the Claims made for Madame Rowley's Toilet Mask and the Grounds on Which it is Recommended to Ladies for Beautifying, Bleaching and Preserving the Complexion:

1st. The Mask is Soft and Pliable and can be Easily Applied and Worn without Discomfort or Inconvenience.

9th. It is a Natural Beautifier for Bleaching and Preserving the Skin, and Removing Complexional Imperfections.

2d. It is durable, and does not dissolve or come asunder, but holds its original shape.

3d. It has been Analyzed by Eminent Scientists and Chemical Experts, and pronounced Perfectly Pure and Harmless.

4th. With ordinary care the Mask will Last for Years, and its valuable properties Never Become Impaired.

5th. The Mask is protected by letters patent, has been introduced ten years, and is the only Gennine article of the kind.

6th. It is Recommended by Eminent Physicians and Scientific Men as a substitute for injurious cosmetics.

7th. The Mask is as Unlike the fraudulent appliances used for conveying cosmetics, etc., to the face as day is to night, and it bears no analogy to them.

8th. The Mask may be worn with PERFECT PRIVACY if desired. The CLOSEST SCRUTINY cannot detect that it has been used.



The Toilet Mask (or Face Glove) in Position to the Face.

TO BE WORN THREE TIMES IN THE WEEK.

10th. The Mask is sold at a moderate price, and one purchase ends the expense.

11th. Hundreds of dollars uselessly expended for cosmetics, lotions and like preparations, may be saved by those who possess it.

12th. LADIES in every section of the country are using the Mask with gratifying results.

13th. It is safe, simple, cleanly and effective for beautifying purposes, and never injures the most delicate skin.

14th. While it is intended that the Mask should be WORN DURING SLEEP, it may be applied, with equal good results, at ANY TIME, to suit the convenience of the wearer.

15th. The Mask has received the testimony of well-known society and professional ladies, who proclaim it to be the greatest discovery for beautifying purposes ever offered to womankind.

## A Few Specimen Extracts from Testimonial Letters.

"I am so rejoiced at having found at last an article that will indeed improve the complexion."

"Every lady who desires a fair complexion should be provided with the Mask."

"My face is as soft and smooth as an infant's."

"I am perfectly delighted with it."

"As a medium for removing discolorations, softening and beautifying the skin, I consider it unequalled."

"It is, indeed, a perfect success—an inestimable treasure."

"I find that it removes freckles, tan, sunburn, and gives the complexion a soft, smooth surface."

"I have worn the Mask but two weeks, and am amazed at the change it has made in my appearance."

"The Mask certainly acts upon the skin with a mild and beneficial result, making it smoother and clearer, and seeming to remove pimples, irritation, etc., with each application."

"For softening and beautifying the skin, there is nothing to compare with it."

"Your invention cannot fail to supersede everything that is used for beautifying purposes."

"Those of my sex who desire to secure a pure complexion should have one."

"For bleaching the skin and removing imperfections I know of nothing so good."

"I have worn the Mask but three nights, and the blackheads have all disappeared."

"The Mask should be kept on every lady's toilet-case."

"I must tell you how delighted I am with your Toilet Mask; it gives unbounded satisfaction."

"A lady was cured of freckles by eight nights' use of the Mask."

"The improvement in my complexion is truly marvelous."

"After three weeks' use of the Mask the wrinkles have almost disappeared."

"My sister used one for a spotted skin, and her complexion is now all that can be desired."

"It does even more than is claimed for it."

"I have been relieved of a muddy, greasy complexion after trying all kinds of cosmetics without success."

## COMPLEXION BLEMISHES

may be hidden imperfectly by cosmetics and powders, but can only be removed permanently by the TOILET MASK. By its use Every Kind of Spots, Impurities, Roughness, etc., Vanish from the Skin, leaving it Soft, Clear, Brilliant and Beautiful. It is Harmless, Costs Little and Saves its user Money. It PREVENTS and REMOVES

## WRINKLES,

and is both a COMPLEXION PRESERVER and BEAUTIFIER. Famous society ladies, actresses, belles, etc., use it. VALUABLE ILLUSTRATED PAMPHLET, with Proofs and Full Particulars, MAILED FREE by

THE TOILET MASK COMPANY, Broadway and 27th St., NEW YORK.

to make money, why don't you advertise, and make a cool million every year? If, however, you only deceive yourself, or fish for notoriety, you had better first study a little anatomy and physiology.

**Dislocation of Patella.**—H. P., Fontanelle, Iowa, writes: "My yearling colt has been affected in her stifle joints since she was five months old. When walking slow or moving in the stable, the leg will straighten back and become stiff, except from the pastern down. With an effort it comes forward with a jerk. There is no soreness and no trouble when going fast."

**ANSWER:**—On account of the morbid changes necessarily existing in an old case like yours, the treatment is uncertain. At first, a repossession of the patella must be effected, then the animal must be kept standing in a stable (a stall that is not too wide), because every movement, but especially getting up and down, is apt to cause a renewed dislocation. If the above is complied with, but not otherwise, a good fly blister that will cause considerable swelling, applied below and at the sides of the joint, will prove to be useful.

**Chronic Laminitis.**—S. M., River Aux Vases, Mo., writes: "I have a mare six years old that was foundered when she was four years old. I don't know what caused it. I had been working her, and she got very warm, and I watered her with cistern water, and she drank heartily, but not more than usual. I fed her on corn and hay, just the same as I usually did, and when I went back to get her, I found that she was foundered. It fell in her feet, and caused her to be lame. When she first goes out to work she can hardly walk, but in the course of an hour she limps only on her right front foot."

**ANSWER:**—Your mare suffers from chronic founder or laminitis, or, more correctly, from a degeneration of the hoofs in consequence of laminitis. Degenerated tissue cannot be restored to health, and, as far as the hoof is concerned, a convex sole pressed down by a hardened exudation in the interior of the hoof cannot be made concave again; neither can the wrinkled and flattened, and therefore weakened, wall of the hoof be restored to a normal condition. But as the frog is very likely yet healthy, the weakened part of the hoof may be somewhat relieved by throwing some of the burden on the yet healthy and strong frog. Hence, a good bar-shoe, judiciously put on by a blacksmith who understands his business, undoubtedly will give relief. Still, even if ever so well shod, the mare should only be used on the farm, and not on hard and rough or billy roads.

**Several Questions.**—J. H. H., Starkey, Cal., writes: "We have a heifer that, since last winter, has been stiff in her joints or in the limbs. The stiffness shifts about consider-

ably, sometimes it is in one shoulder, then in the other; then, again, in one or the other of the hind legs or hips. I presume she must have some rheumatic affection. What can be done for it? She stays in good order, and grows all the time.—We have a three-year-old colt that was cut by barbed wire a year ago last winter. The cut was small, and just in front of the right knee joint. It made a bad, running sore for some months afterwards; it finally got well but left the limb greatly enlarged at the point of injury. He has perfect use of that knee joint and seems to be stout on the limb. Now, the trouble is, that from the strain of favoring the injured leg, or from some other cause, he now has an enlarged ankle on the uninjured leg. This began to come on him last winter, and first appeared as wind-galls, but the enlargement now extends nearly all the way around the joint, and is of a semi-solid consistency. There is also a small swelling at the knee joint, but it seems to be still purely a wind-gall. He is a little weak in that joint. Can anything be done for that?"

**ANSWER:**—Your diagnosis in regard to the heifer is probably correct. As to a treatment, not much can be accomplished with medicines. As a rule, better results are obtained by a good hygienic treatment. In the first place, the animal, if outdoors, requires protection against sudden changes of the weather, but particularly against wet and cold. If kept in a stable, the latter should be dry, clean and well ventilated, and the animal should have a place where the same is not exposed to draft; besides that, the same should be well bedded. Frequent grooming (currying and brushing), and gentle friction applied to the skin) is also essential.—As to your colt, it seems you have a desperate case—a case which suffered neglect while it yet was time to do something. If your colt is not lame, you may endeavor to reduce the swellings by judicious bandaging, but the bandaging invariably must be commenced with at the hoof, and the bandage itself must be renewed at least twice a day. If this is too much trouble, and still you want to do "something," you may rub in once a day a little of an iodide of potassium ointment (1:6) of the common gray mercurial ointment, obtained ready prepared in every drug store, but the effect of this latter treatment will be doubtful.

**Degenerated Tendons.**—A. H. M., Oelrichs, S. Dak., writes: "I have a heavy mare that got her front foot caught in the manger, last February, and I think she strained her leg badly. She was not very lame at first, after driving a little way. She did not get over it as fast as I expected, so I let her stand idle for about a month, when I thought she was well, except a very little enlargement of the cords between the knee and fetlock joint. Then I used her on rough ground two days and she was worse than ever. Her leg swelled

badly, up to the knee, and the mare was so lame she could hardly step on it, where I let her stand idle again. I put on poultices and water applications, to take out the inflammation. It took me two or three weeks. I then put a shoe on her, raised the heel high, and put her in pasture, where she has been ever since. I applied a liniment a good deal, made of turpentine, hartshorn and sweet oil, equal parts. The leg has not improved any for the last month, and the mare is a little lame. There is an enlargement on either side of the cords, on the back part of the leg, not very hard. Putting on a bandage and compress will soften it so that I can feel the cords with my fingers quite readily. I cannot leave the compress on very long because it makes the leg swell below, and she gets lame with it. The leg is so enlarged that the back part is a little larger than the front part. The enlargement is just hard enough so that I cannot feel the cords when I squeeze it with my hands. Please answer by letter."

**ANSWER:**—You say, "Please answer by letter." Did you stop to think what you request? Do you know that FARM AND FIRESIDE has over 250,000 subscribers, and that, if I should attempt to answer every inquiry by letter, I would soon be obliged to keep half a dozen secretaries, and might bankrupt myself in stationery and postage? Such a request is, to say the least, unreasonable. Every one who wants an inquiry answered by letter must send in a fee of one dollar. As to your mare, your treatment was very inconsiderate, and made the case a desperate one. In the first place, a lame animal should have rest until well, and should by no means be worked hard on rough ground. The liniment you used, also, was well calculated to increase the inflammation; and if a swollen leg is bandaged, the bandaging must invariably be commenced with at the hoof; otherwise, the circulation of the blood and of the lymph in the lower part of the foot will be interfered with, and increased swelling, or even gangrenous destruction, will be the result. As it is now, I regard your case as incurable. Rest and judicious bandaging may effect some improvement.

See our Great Offer on page 363.



FOR HORSES.—It has no equal for DISTEMPER, HEAVES, Loss of Appetite, COUCHS, FEVERS, Pink Eye, WORMS, Roughness of Hair, etc. FOR CATTLE.—It increases the QUANTITY and QUALITY of MILK.

FOR CHICKENS.—It has no equal. It makes them lay. Sample package sent prepaid on receipt of price, 25 cents. Send for pamphlet.

Address C. W. Nick, Apothecary, Erie, Pa.

## Our Miscellany.

The red rose whispers of passion  
And the white rose breathes of love;  
Oh, the red rose is a falcon  
And the white rose is a dove.

But I send you a cream-white rosebud  
With a flush on its petal tips;  
For the love that is purest and sweetest  
Has a kiss of desire on the lips.

—Boyle O'Reilly.

Ripe tomatoes will remove ink and other stains from white cloth; also from the hands.

WHY is a debt like coffee? Because the sooner it is settled the less grounds there are for complaint.

"FATHER, they tell us about the angry ocean. What makes the ocean angry?" "Oh, it has been crossed so often."

Rosa BONHEUR is sixty-seven years of age, and her brush is still busy. For her last picture she received \$10,000.

COAL oil will soften boots and shoes that have been hardened by water, and render them as pliable as new.

BARBER: "How would you like to have your hair cut, sir?" Customer: "With scissors, sir! Did ye'spose I wanted it done with a seythe?"

If you want a wind mill, write the Stover Mfg. Co., Freeport, Ill., for a catalogue. See their advertisement on page 364 of this paper.

MRS. GARFIELD lately sold a farm near Prestonburg, Ky., to speculators for \$7,000, which Gen. Garfield bought, during the early days of the war, for less than \$700.

SAMUEL DEY, of Wesley, Maine, is one of the greatest bear hunters of his time. During his life he has killed 220 bears and cubs, receiving over \$2,000 in bounties therefor.

MISS ELIZA PINSON, who died at her home near Atlanta, Ga., recently, had a black beard fifteen inches long, but steadily refused all offers to place herself on exhibition. Polishing her face for toothache when a young girl is believed to have been the cause of the abnormal growth of beard.

TO-MORROW may never come to us; we do not live in to-morrow—we cannot find it in any of our title deeds. The man who owns whole squares of real estate and great ships on the sea does not know a single minute of to-morrow. To-morrow! It is a mysterious possibility not yet born; it lies under the seal of midnight, behind the veil of glittering constellations.—*Lutheran Review*.

TEN dollars paid for drinks creates a market for corn to the value of a fraction over eleven cents. Ten dollars expended for pork, even with the present exorbitant profits of butchers, creates a market for corn to the value of \$3.75. Every bushel of corn used by the distillery, therefore, cuts off the market for over thirty bushels of corn made into pork.—*Resolution offered at the Ohio State Grange*.

THE greatest steeple climber in England is William Green. He has repaired fifty or more steeples and spires, and is sent for from all parts of the kingdom. His great achievements were in repairing the spire of Salisbury cathedral, 404 feet high; Louth, Lincolnshire, 350 feet; Gratham, 320 feet, and a steeple in Cambridgeshire, 280 feet. He has also built or repaired over 500 chimney stacks, the highest being 320 feet.

DR. CHARLES W. DULLES, a prominent physician of Philadelphia, holds to the opinion that there is hope for consumptives, and that medical science will soon be able to control the disease. In a recent paper on the subject, he pointed out that while in England half a century ago there were 55,000 deaths annually among 15,000,000 people, there are at present in a population of 40,000,000 but 14,000 deaths due to phthisis.

OF bluff old Gilman Marston, who died recently in New Hampshire, these stories are told: "He was badly wounded in the arm at Bull Run, but refused to have the member amputated, though the surgeon told him his life depended upon that operation. He insisted upon being placed upon his horse, and was led to the front amid cheers from the 'boys' of his regiment. He once refused to allow his troops to board an overloaded transport, because he had 'brought these men from New Hampshire to fight, not to be drowned.' The orders of a tyrannical superior to build a guard-house 'without so much as a crack in it,' he obeyed literally, solid logs being so used that there was not even a door to enter by. On one occasion he coolly walked along a parapet under a terrible fire of shot and shell, that he might inspire a wavering brigade by his own reassurance."

## A STARTLING FACT.

That three-fourths of the ladies in this country are troubled with female complaint. Women afflicted with that curse of the female sex, such as Leucorrhœa, Whites and all female disorders, can positively be cured by using May Flower Pastilles, an infallible specific which has never failed to cure the most difficult case. Ask your druggist for them, or one box sent by mail on receipt of \$1.00. Pamphlet sent free. MAY FLOWER MED. CO. 85 E. Lake St., CHICAGO, ILLINOIS.

## THE USEFUL HAIRPIN.

A naughty exchange says there is scarcely anything a woman cannot do with a hairpin. They use it to pick their teeth, button shoes, clean finger-nails, punch bedbugs out of cracks, fasten up stray bangs, clean out the stem of their husbands' pipe, scratch their head, pick their toe-nails, run into cakes to see if they are sufficiently done, and about one million other things that the poor deluded men know nothing about, and they do it all with one hairpin, too.

## NOTHING LIKE NERVE.

Housewife—"We have't any cold victuals, nor—"

Tramp—"Cold victuals? Who asked you for cold victuals? I want broiled steak an' fried eggs, an' hot flannel cakes, an' coffee. Cold victuals? The idea!"

Housewife—"Walk in, please. My daughter will plly for you while I'm getting them ready."—*Philadelphia Inquirer*.

## NO DOUBT OF IT.

"You would never believe it, my dear Mr. Simpkins, remarked a homely old flirt, "but when I was young I was really positively nngly."

"My dear madam," replied Simpkins, with the air of a man paying a compliment, "I can the more readily credit your statement since you have so admirably preserved all your youthful attractions."

## SHE DIDN'T OBJECT.

W. Childers Kydd (looking for board)—"Oh, I forgot to mention that two of my party of four are small children. I hope that will make no difference."

Mrs. Hashton (sweetly)—"Oh, not at all! I shall charge just the same as if they were grown up."

## FIBROUS ROOFING CEMENT.

Stops any leak in any roof by any body in a few minutes, for a few cents. Samples free.

A. J. JEWETT, Steubenville, Ohio.

**WATCHES** Nickel Watches, \$2.35, Elgin or Waltham Movement, Stem Wind and Set; in Silver Case \$6.25, Coin Silver \$11.65; Gold Filled \$14.65; "Boss" Gold Filled \$18; Solid Gold \$19.65. All goods warranted as represented. Large catalog free.

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Guitars, Mandolins & Zithers  
in volume and quality of tone are  
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dealers. Beautifully illustrated, de-  
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famous artists MAILED FREE.  
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**BUGGIES CARTS** and **HARNESS** at  $\frac{1}{2}$  PRICE  
\$38 Order direct from Factory and  
save PROFITS of MIDDLEMEN.  
Why pay \$90.00 for a Buggy  
when we sell you a BETTER  
Buggy for \$45.50 Warranted.  
Steel Axle and Tire, Leather  $\frac{1}{4}$  Top Leather trim.  
\$100. 4 passenger Top Phaeton \$47.50  
Oak Tan HARNESS at  $\frac{1}{2}$  Price, \$5.  
\$10 Buggy Harness \$4.75. CART \$10  
\$27 Double Farm \$13.25. CART \$10  
U. S. BUGGY & CART CO. CINCINNATI, O.  
26 Lawrence Street. Catalogue No. 13 Free.

## HIRES'

25c HIRES' IMPROVED 25c  
**ROOT BEER!**  
IN LIQUID. NO BOILING OR STRAINING EASILY MADE  
THIS PACKAGE MAKES FIVE GALLONS.

## ROOT BEER.

The most APPETIZING and WHOLESOME  
TEMPERANCE DRINK in the world.

TRY IT.

Ask your Druggist or Grocer for it.

C. E. HIRES, PHILADELPHIA.

## Stylo Fountain Pens

## GIVEN AWAY

Everybody recognizes the utility of the Stylo-graphic and Fountain Pen. They are a recognized necessity to the business and travelling man. They are equally convenient for every one who writes. The high price of a reliable pen that would not continually be out of order has, however, prevented their general use; a good pen costing from \$2 to \$5. The Stylo Fountain Pen—the invention of Mr. Stylo—overcomes all these objections. It uses any kind of ink, and never gets out of order. When filled it writes from the word "go," and a large amount of writing can be done with one filling. Don't use the old-fashioned pen with its continual dip, dip, dip, when a Stylo Fountain Pen complete will be given you entirely FREE. After once using it you will never use any other.

HOME CHEER is the most popular 16-page story and family paper published, and has already a circulation of 200,000 monthly. We want twice that number of readers next year, that is why this great offer is made. If you will state in what periodical you saw this advertisement and send 25 cents, postal note, or 28 cents, in stamps, we will send you HOME CHEER ONE YEAR on trial, and will also send you absolutely free and postpaid, one STYLO FOUNTAIN PEN, complete and ready for use. Better send at once, you may not see this again. Address W. N. SWETT & CO., 42 Charles St., Lynn, Mass.

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Cleanses and beautifies the hair.  
Promotes a luxuriant growth.  
Never fails to restore Gray  
Hair to its Youthful Color.  
Cures scalp diseases & hair falling.  
50c and \$1.00 at Druggists.

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Any TWO of the Books will be Sent as a Premium to Any One Sending One NEW Yearly Subscriber, at 50 Cents, in which case the new subscriber is not entitled to any premium.

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## Premium No. 803.

This popular cook book contains 256 pages and is not surpassed, and perhaps has no equal. Over 250,000 copies have been sold. The recipes were sent us by subscribers to our papers, which are so popular that they have over 300,000 subscribers. We asked the readers of our papers to contribute their best recipes, those which they had tried and knew to be good for publication in a book. Many Thousand Recipes were received, and about 1,000 of the choicest selected. They came from nearly every State and Territory in

the Union and Canada, and the names and post-office addresses of the contributors are given in the book. Remember, it Contains Double the number of Recipes contained in many books costing \$3.00.

## HANDY HORSE BOOK. Premium No. 820.

A complete manual for horsemen, embracing How to Breed, Buy, Train, Use, Feed, Drive, and How to Ride a Horse. It also gives the symptoms, causes and cures of all known horse diseases. It is invaluable when horses are attacked with diseases requiring prompt attention, and in districts remote from veterinary surgeons, because it enables any one to doctor their own horse. It contains a large number of pictures showing the position of the different organs of the horse. No one who owns or uses a horse should fail to have a copy of this book. 180 pages.

## THE COMPLETE POULTRY BOOK. Premium No. 816.

Tegetmeier's Improved. For many years Tegetmeier's Poultry Book has been the standard, but its price, which is nine dollars, has placed it beyond the reach of most people. We have improved this great book, and reproduced it in this form so that the masses can now get it for almost nothing. It suits at once the plain poultreer, who must make the business pay, and the chicken fancier whose taste is for gay plumage and strange, bright birds. It is a reproduction of Tegetmeier's unexcelled work. This edition has the same illustrations without colors. 224 pages.

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Philadelphia, Pa., or Springfield, Ohio.

## Cheering Words from Our Subscribers.

SPRINGVILLE, IOWA, July 8, 1890.

The premium High Arm Chicago Singer Sewing Machine, arrived on good time and it is A No. One. My wife thinks it cannot be excelled, both for beauty and durability.

GUSTAVUS NORTH.

MONTREAL, CANADA, June 15, 1890.

We would not sell our picture, "Christ Before Pilate," for \$10.00. A good one, it is.

C. R. WIESENHORN.

NASIUA, N. H., July 5, 1890.

I have an Atlas I gave \$9.00 for and I think yours is just as good. ARTHUR H. PUTNAM.

PAXTON, ILL., July 12, 1890.

I think I shall want about fifty copies of the Peerless Atlas. For a start, I got twelve orders the first day. CHAR. P. YOUNGGREEN.

LEXINGTON, KAN., June 8, 1890.

I received the Peerless Atlas of the World. Would not be without it for \$5.00.

E. P. KEITH.

PIERRE, S. DAK., June 17, 1890.

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A. G. SWANSON.

HERIN

## Smiles.

## A VARIATION OF HOOD.

I REMEMBER, I remember,  
That boarding-house forlorn,  
The little window where the smell  
Of hash came in at morn.  
I mind the broken looking-glass,  
The mattress like a rock,  
The servant girl from county Clare,  
Whose face would stop a clock.

I remember, I remember,  
The gutta-percha hen  
They used to serve as chick of spring,  
To thirteen hungry men.  
We blasted it with dynamite,  
We vexed its bones full sore.  
In vain; 'twas served up fricassee,  
For two or three days more.

I remember, I remember,  
The next room's fiendish wight,  
Who practiced the B-flat cornet  
From early morn till night.  
We stood his dreary "Peek-a-boo,"  
"Sweet Violets" and more.  
But when he tried "We Never SPEAK,"  
We wallowed in his gore.

I remember, I remember,  
The lengthy, weekly bill,  
Received by me with shudders and  
The symptoms of a chill.  
I also call to mind the night  
When no one was about,  
When into space I dropped my trunk,  
And through the dark skipped out.  
—Chicago Herald.

## UNMASKED.

WE had dauced together beneath the  
gleam  
Of the warm gaslight from the chandlers,  
And I told my heart 'twas a fleeting dream,  
But my heart was bold and would have no  
fears;  
For I felt her breath as it touched my hair,  
And her great, brown eyes, with their pierc-  
ing gaze,  
Gleamed out from her mask, while her lips so  
fair  
Lay close to mine in the whirling maze.  
I led her away as the music died  
In a plaintive strain on the midnight air,  
To a cosy nook in the hallway wide,  
Where the light shone dim on the oaken  
stair.  
And I held her hand as my heart beat time  
To the rhythmic tones of the ancient clock,  
And the words I whispered were set in rhyme,  
While the clock kept time with a dull "tick  
tock."  
Then my arm stole gently around her waist,  
And I pressed a kiss on her throbbing brow;  
But just at that moment her mask, displaced,  
Fell down at her feet, I scarce know how.  
I do not remember what followed then,  
For it all seems shrouded in clouds of mist.  
Only know that I fainted when  
I saw 'twas my sister that I had kissed!

## AN ANTIDOTE FOR COWARDICE.

UST before the battle of Antietam five recruits came down for  
my company. There were no  
bounty jumpers at that stage of  
the game, although the courage  
and patriotism of all the  
recruits could not be vouchsafed for.  
One of the batch was named  
Danforth, a farmer's son, fresh  
from the corn fields, and as we  
took up the line of march, head Lee off and  
bring him to bay, Danforth said to me:  
"See here, sergeant, I've made a mistake."  
"How?"  
"I hain't got no sand. I allus thought I had,  
but when I come down here and see what war  
is, I find I hain't got the spunk of a rabbit."  
"That's bad."  
"So it is. We're going to have a fight party  
soon, and I know what'll happen. I shall bolt,  
as sure as shooting."  
"Then you'll be called a coward, and dis-  
graced forever."

"That's so, and I don't want it. I want you  
to do me a great favor."  
"Well?"  
"Wall, if I kin git mad, I'll be all right, and  
forget my shaking. Keep your eye on me, and  
as soon as we git within five miles of the  
rebels, kick me good and stout."

After some further talk I promised him. We  
were in Hooker's corps, and as we moved in  
against Jackson, Danforth obliqued alongside  
and said:

"Sergeant, kick me, or I shall bolt. I haven't  
got sand enough to see a chicken die."

We were moving through the timber, and I  
stepped behind him and "lifted" him twice,  
as hard as I could kick. He shot aside, and  
next time I saw him we were at a fence on the  
edge of a corn field. The fire was hot and the  
men were falling thick. I had just fired from  
a rest on the top rail when Danforth came up,  
faced the other way, and said:

"More kicks, sergeant! I know I've dropped  
two of them, but my sand is going."  
I kicked him again with a good deal of vigor,

and just then we got the order to advance,  
and he was the first man over the fence. Half  
an hour later we were driven back, consider-  
ably disorganized, and as I reached the fence I  
came across Danforth again. He had a rebel  
captain by the collar, and was carrying the  
officer's sword in his hand. As he saw me he  
called out:

"Sand is all right, sergeant. No more kicks.  
As soon as I take this chap to the rear I'm go-  
ing back and collar old Stonewall himself or  
die trying."

## A FAMILY LIKENESS.

Some soldiers who were quartered in a coun-  
try village, when they met at the roll call, were  
asking one another what kind of quarters they  
had got. One of them said he had got very  
good quarters, but the strangest landlady ever  
he had—she always took him off.

His comrade said he would go along with  
him, and would take her off. He goes and  
offers to shake hands with her, saying, "How  
are you, Elsia?" (that was her name).

"Indeed, sir," says she, "ye ha the better o'  
me; I dinna ken you."

"Dear Elsia, do ye no ken me? I am the  
devil's sister's son."

"Dear save us," quoth she, looking him  
broadly in the face, "oh, man, but ye're like  
your uncle."

## THEY HAD TICKETS.

"I never could understand," said the passenger  
who sat next to the window, "how any  
man with a grain of common sense can be  
taken in by such a transparent trick as the  
bunko game."

"Nor I," said the man next to the aisle, "it's  
a little the thinnest gouge that ever was in-  
vented to take in gudgeons."

"Mornin' paper!" yelled a newsboy, putting  
his head in at the car door, "all about the  
drawin' of the Louisiana lottery!"

"Here!" exclaimed the two passengers,  
simultaneously, jumping to their feet and  
rushing frantically toward him.

## A LARGE BEQUEST.

Lawyer—"Are you the brother of John  
Smith, of Nebraska, sir?"

Smith—"I am; but I haven't heard anything  
from him for years."

"Well, he died last month."

"Indeed! Did he leave anything?"

"Yes, he left everything he had in the world  
to you."

"Thank heaven—how much?"

"Eight children and the mortgage on the  
farm."—Burlington Free Press.

## A COOL COSTUME.

Mrs. Gazzam—"George, I really must have  
some money for a new dress."

Gazzam—"Dresses are all going out of style."

Mrs. Gazzam—"What on earth do you  
mean?"

Gazzam—"Well, I read in a fashion article  
that 'nothing but coral ornaments will be worn  
this season.'"

## SHOULD HAVE HAD A MEDAL.

"Fido ate the canary yesterday."

"Ate the canary! What did you do to him?"

"We gave him some pepsi, poor thing! You  
know he isn't used to such a strong diet."—  
Puck.

## THE MUMMY AND THE MELON.

Watermelon seeds were found in an Egyptian  
tomb that was 3,000 years old. There was  
no doubt about their being watermelon seeds,  
because the mummy was all doubled up.

## LITTLE BITS.

Why do the heathen rage? Probably to keep  
warm without bothering about clothes.

A piece of limburger cheese is like a tack in  
one respect—you can always find it in the  
dark.

"I hear Jay Gould entertained an angel un-  
awares, the other day."

"Lucky for the angel. If Gould had known  
who he was, he'd have absorbed his crown and  
harp."

It was not a Harvard graduate who said he  
would like to have seen Queen Victoria's  
face when she heard that the Declaration of  
Independence had not been vetoed by the  
president.

Mrs. Grump—"Bobby, I shall have to tell  
your father about you; you've been fighting!"

Bobby—"Well, mum, hain't I been licked  
bad enough without havin' another scrap with  
pa?"—Texas Siftings.

"When does a man have seasickness the  
worst?" asked the major.

"When he goes to sea, I suppose," replied the  
judge.

"No; it is when he throws up the sponge."

All men are born free and equal, according  
to a document more or less celebrated at this  
season of the year, but how women are born  
is still a matter of some doubt, since no mea-  
sure is made of the fair sex in the Declaration.

Two ladies were sitting by an open window,  
while the choir was practicing in a neighbor-  
ing church. "How loudly they sing to-night,"  
said one. "Yes," returned the other, thinking  
of the crickets in the grass, "and it is said they  
do it with their hind legs."

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CALIFORNIA.—(Berkeley) Bulletin No. 87, June 7, 1890. The conservation of wines.

CANADA.—(Guelph) Bulletin No. 50, June 2, 1890. Corn ensilage. Bulletin No. 51, June 9, 1890. Fattening lambs.

CONNECTICUT.—(State Station, New Haven) Bulletin No. 103, May, 1890. Analyses and valuations of fertilizers.

LOUISIANA.—(Sugar Experiment Station, Anderdon Park) Report of field experiments with sugar cane.

MAINE.—(Orono) Annual report for 1890, Part II.

MINNESOTA.—(St. Anthony Park) Bulletin No. 11, June, 1890. Deep versus shallow cultivation of corn. Cross-fertilization and selection of corn. Peas, beans, flax and other crops. Results of seeding rusted, frosted and frozen wheat of 1888.

NEBRASKA.—(Lincoln) Bulletin No. 14, June 7, 1890. Insects injurious to young trees on tree claims.

OREGON.—(Corvallis) Annual report for 1889.

SOUTH CAROLINA.—(Columbia) Bulletin No. 8, March, 1890. Chemical statistics of corn crops of South Carolina. Maize fodder ensilage. Cow peas as a forage crop. Composition of soja bean vines.

TEXAS.—(College Station) Bulletin No. 9, May, 1890. Pear stocks. Some parasitic fungi of Texas. Bulletin No. 10, May, 1890. Experiment in cattle feeding.

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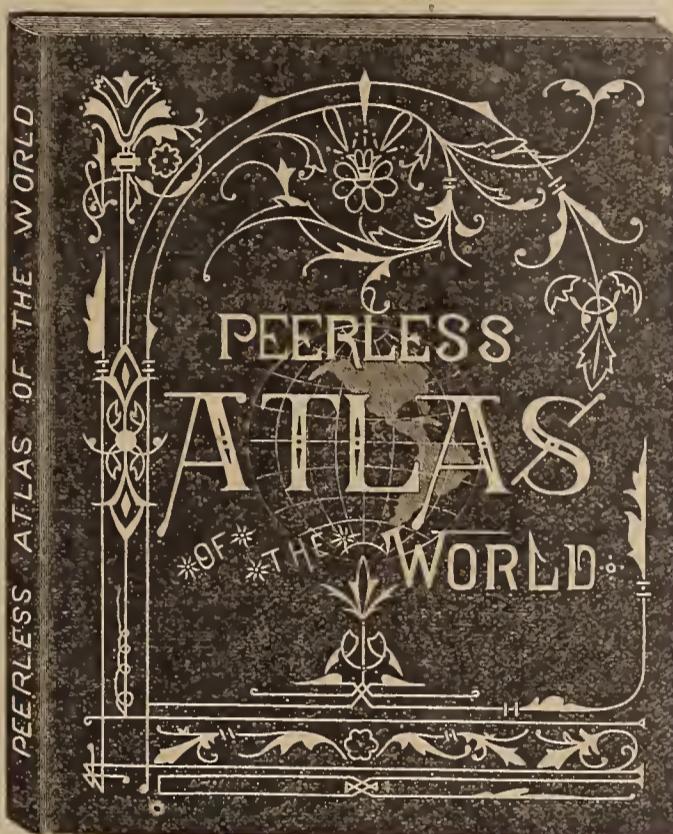
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Fancy Cream'y...	14 @ 16	16 @ 17	17 @ 18
Dairy.....	10 @ 11	9 @ 15	9 @ 10
Common.....	3 @ 6	3 @ 8	4 @ 6
GRAIN.			
Wheat No. 2 spr'g	86 1/4	93	
" No. 2 w'n't'r	87	1 02	
Corn, ".....	37 @ 38	43	48
Oats, ".....	31 @ 34	33 @ 35	33
LIVE STOCK.			
Cattle, Extra.....	4 90 @ 5 00	5 00	
" Shippers.....	3 80 @ 4 90	4 00 @ 4 70	2 00 @ 3 75
" Stockers.....	2 25 @ 3 85	3 12 @ 3 87	
Hogs.....	3 40 @ 3 80	4 00	3 00 @ 4 25
Sheep, com. to good	4 35 @ 4 90	4 50 @ 5 90	2 50 @ 3 25
" Lambs.....	5 00 @ 6 30	6 12 @ 7 62	
PROVISIONS.			
Lard.....	5 80	6 05	5 50
Mess Pork.....	11 70	13 25 @ 13 75	12 50 @ 12 75
SEEDS.			
Flax, No. 1.....	1 31		
Timothy.....	1 33 @ 1 40		
Clover.....	3 15 @ 3 40		
WOOL.			
CHICAGO.	BOSTON.	ST. LOUIS.	
Fine, Ohio & Pa.....			
" Western.....			
" Unwashed.....	17 @ 21		
Median, Ohio & Pa.....			
" Western.....	30 @ 33		
" Unwashed.....	23 @ 26		
Combing & Delaine.....			
Coarse & Black.....	18 @ 19		

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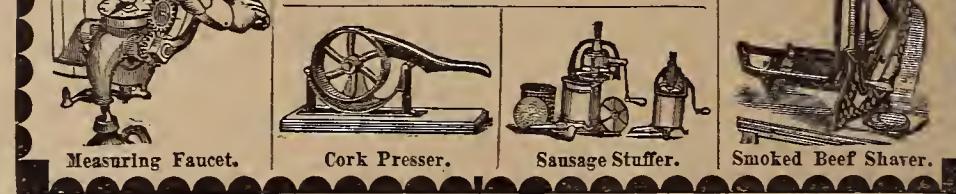


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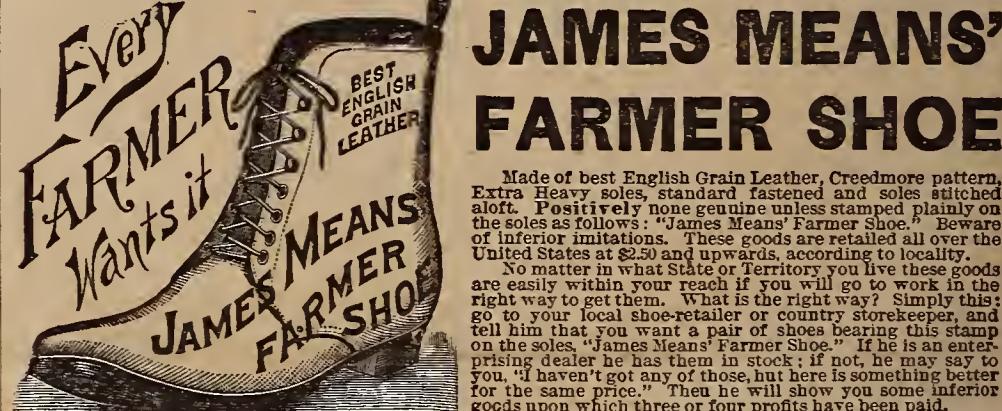


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Ask your shoe retailer or country storekeeper for

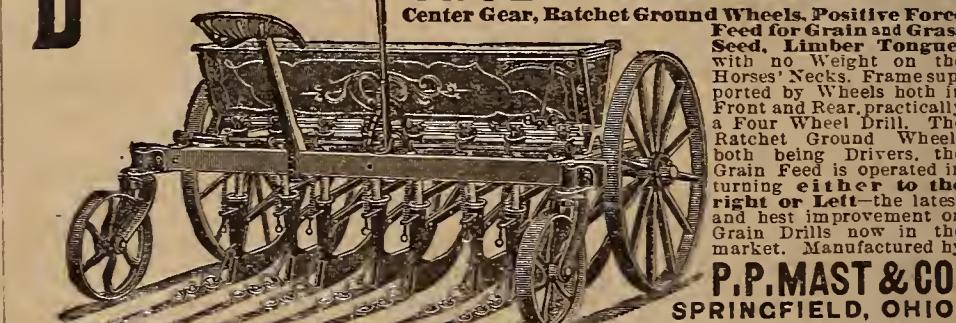


Made of best English Grain Leather, Creedmore pattern, Extra Heavy soles, standard fastened and soles stitched aloft. Positively none genuine unless stamped plainly on the soles as follows: "James Means' Farmer Shoe." Beware of inferior imitations. These goods are retailed all over the United States at \$2.50 and upwards, according to locality. No matter in what State or Territory you live these goods are easily within your reach if you will go to work in the right way to get them. What is the right way? Simply this: go to your local shoe-retailer or country storekeeper, and tell him that you want a pair of shoes bearing this stamp on the soles, "James Means' Farmer Shoe." If he is an enterprising dealer he has them in stock; if not, he may say to you, "I haven't got any of those, but here is something better for the same price." Then he will show you some inferior goods upon which three or four profits have been paid.

All you have to do is to tell him that he must supply you with the "James Means' Farmer Shoe," or else you will be can buy the goods at wholesale of James Means & Co., Boston, Mass., and that he can make a fair business profit on them after all the freight bills have been paid, even if he is on the borders of the Pacific Ocean. Some of our largest customers are on the Pacific Coast. Tell your retailer that you are tired of buying shoes made of inferior leather. Tell him also that an investment of less than eleven dollars will enable him to carry an assortment of sizes of these goods in his stock. Then if the man has any enterprise he will write to us, and in a week or two he will be able to furnish you with the shoes. If not, please write to us, and we will see that you are supplied with the shoes you need. We originate, while others copy. We lead, while others follow.

JAMES MEANS & CO., 41 Lincoln St., Boston, Mass

**BUCKEYE LOW DOWN SHOE GRAIN DRILL**



Center Gear, Ratchet Ground Wheels, Positive Force Feed for Grain and Grass Seed. Limber Tongue, with no Weight on the Horses' Necks. Frame supported by Wheels both in Front and Rear, practically a Four Wheel Drill. The Ratchet Ground Wheels both being Drivers, the Grain Feed is operated in turning either to the right or left—the latest and best improvement on Grain Drills now in the market. Manufactured by

P. P. MAST & CO., SPRINGFIELD, OHIO.

ALSO MANUFACTURERS OF BUCKEYE FERTILIZER DRILLS, BUCKEYE SEEDERS, BUCKEYE CIDER MILLS, and HAY RAKES. We also manufacture this same style in a Combined Grain and Fertilizer Drill.

BRANCH HOUSES: Philadelphia, Pa.; Peoria, Ill.; St. Paul, Minn.; Kansas City, Mo.; San Francisco, Cal.

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\$5.00 and up. \$55. \$12.00 and up.

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Best Fences and Gates for all purposes. Free Catalogue giving full particulars and prices. Ask Hardware Dealers, or write

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300 Market Street, PHILADELPHIA, PA.

# FARM & FIRESIDE

EASTERN EDITION.

VOL. XIII. NO. 22.

PHILADELPHIA, PA., and SPRINGFIELD, OHIO, AUGUST 15, 1890.

TERMS { 20 CENTS A YEAR.  
24 NUMBERS.

The Circulation of FARM AND FIRESIDE  
this issue is

**250,600 COPIES.**

The Average Circulation for the 16 issues from  
January 1, 1890, to August 15, 1890, has been

**250,706 COPIES EACH ISSUE.**

To accommodate advertisers, two editions  
are printed. The Eastern edition being  
100,300 copies, the Western edition  
being 150,500 copies this issue.

Farm and Fireside has the Largest Circulation  
of any Agricultural Journal in the World.

## Current Comment.

In the New York *World*, weekly edition, June 18, under the heading, "War on the Farmer," is an article in three sections on the subject of prices of farm implements to foreign and domestic buyers. The first section contains photographic reprints of both the foreign and domestic advertisements of certain farm implements, with comments thereon, and is signed by T. E. Willson. The second section is about S. L. Allen & Co., the manufacturers of the Planet Jr. garden implements. In the third section are quotations from and comments on an article in the *Farm Implement News*.

A subscriber sent us a copy of this issue of the *World*, and asked if that paper is trying to humbug the farmer. After answering in the affirmative, FARM AND FIRESIDE, July 15, says, referring to the third section named above:

If our friend will send for the Chicago *Farm Implement News*, referred to and quoted in that article ["War on the Farmer"], he will get more on the other side of the controversy [between *World* and *Farm Implement News*] than the *World* quotes.

Some of the manufacturers mentioned in these articles [in *World* and *Farm Implement News*] have publicly and emphatically denied that they sell their farm instruments cheaper abroad than at home, and state that they are prepared to substantiate what they say, and will offer every facility for a thorough investigation.

Let our friend write to or visit the manufacturers, and hear what they have to say in answer to the reckless charges of political organs. They are entitled to a hearing.

Take one example from the list of implements given [republished in *World* from *Farm Implement News*]. It is stated that the No. 40 Oliver plow is sold to English farmers for less than to the American. The manufacturers publicly, over their own signature, give an unqualified denial of the statement, and defy their accusers to produce truthful evidence to sustain their charges. In speaking of prices, they say:

"Our No. 40 is our standard plow, both at home and abroad. In the United States it retails, with wheel and jointer, for \$14—never any more. The same plow, fitted exactly the same, sells at retail in England and Scotland for from \$16 to \$18, so that the American farmer buys his plow at a considerable saving. In Mexico, South America, Australia and elsewhere, the difference is even greater, and we assert, unqualifiedly, that in all cases our plows are sold at a less rate in the United States to the user than they are to any foreign country. Nor do we sell to the foreign dealer at a less price than to the American dealer, all reports to the contrary notwithstanding."

First, in these comments we called attention to the controversy between the two papers named. Then, as an example of what manufacturers had to say in

answer to the charge of unscrupulous demagogues, that they were robbing the American farmer, we selected one implement, the No. 40 Oliver plow, from a list republished in the *World*, June 18, from the *Farm Implement News*, June, repeated the charge made against the Oliver plow manufacturers by political speakers and the political press, stated the denial of the manufacturers, and gave an extract from a letter published by them. The letter from which the extract is taken is dated May 30, 1890, signed "Oliver Chilled Plow Works," and published in the June number of the *Chicago Farm Implement News*. If any reader doubts our word, or wishes to verify any statement made in the comments republished above, we ask him to do what we have already suggested, send for the June number of the *Chicago Farm Implement News*.

The *World*, of July 23, editorially accuses FARM AND FIRESIDE of lying and forgery, and its correspondent, T. E. Willson, in a long article, frantically but vainly endeavors to sustain the false, malicious and libelous charge. We have not space to give the article and editorial in full, but will give a few extracts from them, and will show that both correspondent and editor are liars. The italics are ours. Willson says:

This editorial in the FARM AND FIRESIDE is not based on a misapprehension or misunderstanding of the facts. The writer is not in error or mistaken. There is no chance for either error or mistake, for the "War on the Farmer" referred to is my letter of June 14, in which attention is simply called to the photographed reprints, among others, of the two advertisements of the Ann Arbor Agricultural Company's implements, offering them at retail to the foreign buyer at one half the price to the American buyer. The two advertisements—one in Spanish and circulated in South America only, the other in English, and circulated in the United States only—told the whole story, and I had nothing to add to what they said.

This agricultural editor is lying. He is deliberately lying, and lying for hard cash, as represented by advertising. He has not a reader or a friend who will render any other verdict after reading the article to which he refers, and I am willing to leave the verdict to any jury he may name.

The last paragraph of the article, and the extract from the Oliver Plow Company's letter, is more than a lie; it is a FORGERY of the most daring kind. The Oliver plow is not mentioned in the article. It has never been mentioned in any article published in the *World* during the past year. No statement has ever been made in the *World*, by any correspondent, concerning the price at which either the Oliver plow or any other plow was ever sold to English farmers. No baser forgery ever was penned than the statement beginning, "Take one example from the list of implements given. It is stated that the No. 40 plow, etc., and the moral character of the forger may better be imagined than described.

"Nor does the denial of the Oliver Plow Company (which I think is two years old; I saw it in these words, as nearly as I can remember, two years ago) even deny that its plow is sold 'free-on-board, New York, for export only,' at a less price than it is sold to the American farmer. The denial it confined strictly to a denial of a charge that has never been made against any plow—that the price in the foreign country, with freight and duty added, is less than in the United States.

The editor says:

When the FARM AND FIRESIDE, an agricul-

tural newspaper published at Springfield, O., descends to forgery to discredit *The World*, it must be in a pretty bad way for argument.

*The Oliver Plow Company has not been mentioned or alluded to in The World this year. The Oliver plow is not included in the list of implements given.* It has not been "stated that the No. 40 Oliver plow," or any other number, was either sold or given away, and the carefulness with which this forger particularizes the exact number of the plow betrays the deliberateness and malice of his misrepresentation.

To crown all, the "denial" of the Oliver Company which it quotes was published long ago and does not relate to anything *The World* or any correspondent of *The World* has ever said or even imagined. The forgery is absolutely without palliation or excuse.

The FARM AND FIRESIDE has a reputation to lose. Its owners are supposed to be honorable men of business. A prompt repudiation of this malicious forgery and the prompt dismissal of the forger can alone save it and them from the condemnation of all fair-minded men.

FARM AND FIRESIDE goes them one better with a forged extract from *The World*, and a forged denial of it from an agricultural implement maker.

FARM AND FIRESIDE has deliberately falsified the facts and forged a pretended extract to deceive them.

In the *World*, June 18, in the third section of "War on the Farmer" appears the following, republished from the *Farm Implement News*:

No. 40 Oliver plow, with wheel and jointer, retail, United States, \$14; in England, \$16 to \$18; in other foreign countries still higher. Other plows and other makes of plows are sold at proportionate advances over home prices.

Correspondent and editor both say that the Oliver plow is not mentioned or alluded to in the *World* this year. Both of them are liars, convicted on the evidence of their own paper.

Correspondent and editor say that the extract from the manufacturers' letter is a forgery, and that their denial was published long ago. Both correspondent and editor are liars. The letter from which that extract was made is dated May 30, 1890, and published in the June number of the *Chicago Farm Implement News*.

The *World* correspondent also lies about the denial in the last sentence we have quoted from his article. The Oliver Company unqualifiedly deny that they sell their plows to the foreign dealer at a less price than to the American dealer.

When the *World* correspondent says that the editorial in FARM AND FIRESIDE refers to his letter about the photographed reprints of advertisements, he deliberately lies for the purpose of sustaining his false and malicious charges of forgery. His letter was not referred to in our comments, as any reader can see. Since *Farm Implement News* is not mentioned or quoted in his letter, he could not very well help knowing that our comments did not refer to what appeared over his signature. He must have lied deliberately and intentionally. Possibly—it would be charity to presume so—he is afflicted with actinomycosis, and simply made a mistake by assuming that he and the *World* were one and the same. If so, the services of our veterinarian are at his command.

FARM AND FIRESIDE did not say that

the *World* had made any charges against the Oliver Plow Company, or that the *World* had stated that their No. 40 plow was sold to English farmers for less than to American, the *World's* claims to the contrary, notwithstanding. Other liars than the *World* made the statement about the foreign prices of the Oliver plows.

The accusations of forgery came from an unscrupulous demagogue. In reply we have used plain language. We have not hesitated to call a liar a liar, and more than that, we have proved it, too.

A prompt retraction of its charges of forgery and the prompt dismissal of its lying correspondent can alone save the *World* from the just condemnation of all fair-minded men.

HAVING replied to the *World's* false and malicious charges, we will proceed to puncture its big bubble of misrepresentation about farm implement manufacturers. It publishes, side by side, the export and domestic prices of various agricultural implements. Calling attention to the margin between them, the *World* attempts with sensational headlines and windy comment to delude the American farmers into the notion that the American manufacturers are robbing them. To make out a plausible case, the *World* plays Ananias.

To make the matter plain, we will give the different methods used in the foreign and domestic trade in farm machinery. The bulk of American farm machinery sent to foreign countries is sold through exporting agents for CASH on delivery in New York. Most of the farm machinery sold in this country is sold through agents to the farmers on TIME—frequently long time.

The export prices given in the *World* are net cash prices. The domestic prices given are retail, list, credit prices, from which there is always a good discount to farmers who pay cash. The *World* is careful not to explain this, but unscrupulously parallels wholesale cash prices with retail credit prices.

The size of the margin between these prices is due to the credit system of doing business, not to efforts of manufacturers to plunder farmers. By comparing the wholesale cash with the retail credit prices of goods of all kinds, the *World* could, in the same way, show that all business men were robbing their customers.

In their foreign advertisements, manufacturers give the net cash New York prices of their implements. The *World* publishes photographic reprints of these, and charges that manufacturers are retailing to the foreign farmer at much lower prices than to the American. In fact, this is not so. In the foreign trade, manufacturers do not sell at retail direct to purchasers. The bulk of machines sent abroad are wholesaled for cash on delivery in New York. In order to get an American implement the foreign farmer must haggle through an agent and pay the New York cash price, the exporting agent's commission, the transportation charges and the foreign duty.

Let American farmers club together and buy their machines wholesale for cash direct from the manufacturers and they can get them at less than the export prices.

## FARM AND FIRESIDE.

ISSUED 1st AND 15th OF EACH MONTH BY  
MAST, CROWELL & KIRKPATRICK.THIS PAPER HAS BEEN ENTERED AT THE POST-OFFICE  
AS SECOND-CLASS MAIL MATTER.

## TERMS OF SUBSCRIPTION:

One Year, - (24 Numbers), - 50 Cents.  
Six Months, - (12 Numbers), - 30 Cents.  
The above rates include the payment of postage by us. Subscriptions can commence any time during the year. Send for Premium List and see premiums offered for obtaining new subscribers.

Payment, when sent by mail, should be made in Express or Postal Money Orders, Bank-checks or Drafts. WHEN NEITHER OF THESE CAN BE PROCURED, send the money in a registered letter. All post-masters are required to register letters whenever requested to do so. Do not send checks on banks in small towns.

Silver, when sent through the mail, should be carefully wrapped in cloth or strong paper, so as not to wear a hole through the envelope and get lost. Postage stamps will be received in payment for subscriptions in sums less than one dollar.

The date on the "yellow label" shows the time to which each subscriber has paid.

When money is received the date will be changed, which will answer for a receipt.

Discontinuances. Remember that the publishers must be notified by letter when a subscriber wishes the paper stopped, and all arrearages must be paid. Do not fail to give your post-office address.

When renewing your subscription, do not fail to say it is a renewal. If all of our subscribers will do this, a great deal of trouble will be avoided. Also, give your name and initials just as now on the yellow address label; don't change it to some other member of the family; if the paper is now coming in your wife's name, sign her name, just as it is on label, to your letter of renewal. Always give your post-office address. We have an office at 927 Chestnut Street, Philadelphia, Pa., also at Springfield, Ohio. Send your letters to the office nearest to you and address

**FARM AND FIRESIDE.**  
Philadelphia, Pa., or Springfield, Ohio.

## The Advertisers in this Paper.

We believe that all the advertisements in this paper are from reliable firms or business men, and do not intentionally or knowingly insert advertisements from any but reliable parties; if subscribers find any of them to be otherwise we should be glad to know it. Always mention this paper when answering advertisements as advertisers often have different things advertised in several papers.

## Our Farm.

## NOTES ON BRITISH FARMING.

BY AN ENGLISHMAN.

[Continued from our last issue.]

## FARM BUILDINGS.

The following embodies modern English ideas respecting the best arrangement of farm buildings: The barn, with its thresher, etc., naturally forms the nucleus of the homestead, and regulates the distribution of the other buildings. The command of water power often determines the exact site of the barn, and, indeed, of the whole buildings. A very usual and suitable arrangement is to have the whole buildings forming a lengthened parallelogram, facing south or south-east, the barn being placed in the center of the north range, with the engine-house behind it, and the straw-house at right angles in front, with doors on both sides for the ready conveyance of litter and fodder to the yards, etc. It is always advantageous to have the barn of sufficient height to afford ample accommodation to the threshing and winnowing machinery. When the disposition of the ground admits, it is a great convenience to have the stock-yard on a level with the upper barn, so that the unthreshed grain may be wheeled into it on barrows, or on a low-wheeled truck drawn by a horse. Failing this, the sheaves are usually pitched in at a wide opening from a framed cart. The space on which the cart stands while this is going on is usually paved, that loose ears and scattered grain may be gathered up without being soiled; and it is a further improvement to have it covered with some simple roof to protect the sheaves from sudden rain.

It is a good arrangement to have the straw-barn fitted up with a loft, on a level of the opening at which the straw is discharged from the threshing-mill, so as to admit of fodder being stored above and litter below. A sparred trap-door in front of the shaker retains the straw above, or lets it fall to the ground, as is required. This upper floor of the straw-barn is the most convenient place for fixing a chaff-cutter, to be driven by the threshing-power. The granary should communicate with the upper barn, that the dressed grain may be raised to it by machinery.

The cattle-housing, of whatever description, where there are the largest and most frequent demands for straw, is placed nearest to the straw-house and in communication with the turnip stores and the house (if any) in which food is cooked or otherwise prepared. Where cattle are

bred, the cow-house and calf-house are kept together.

A roomy working court is always a great convenience, and it suits well to have the stable opening to it, and the cart-shed and tool-house occupying another side. Costly machines, such as grain-drills and reaping machines, require to be kept in a locked place, to preserve them from the collisions and the loss or derangement of their minute parts, to which they are exposed in an open cart-shed.

Liquid manure tanks are at present in universal repute, but we shall endeavor to show, when treating of manures, that they are not so indispensable to a farm-yard as is generally asserted. In Scotland it is customary to carry the dung from the byres into a yard in which young cattle are kept, where it is daily spread about and subjected to further treading, along with such quantities of fresh litter as are deemed necessary. That from the stables is carried into the adjoining feeding-yard, and it is usually remarked that the cattle occupying it make more rapid progress than their neighbors.

An important part of the buildings of a farm are the cottages for its laborers. It is in all cases expedient to have the people required for the ordinary working of a farm resident upon it; and it is always much better to have families each in its own cottage, than a number of young people boarded in the farm kitchen or with the farm overseer. These cottages are usually a little removed from the other farm buildings, and it is, on various accounts, better to have them so. There is, however, an advantage in having the cottages of the farm steward and cattle-man either within the court-yard or close to its entrance, that these responsible functionaries may at all times be near their charge, and especially that they may be at hand when any of the live-stock require night attendance. As there are manifold advantages in having but one main entrance to the homestead, and that closed by a gate which can be locked at night, it will be obviously necessary to have the keeper of the key close at hand, to open the gate by night if required. Much more attention than formerly is now paid to the construction of cottages. The apartments are better floored, higher in the roof, and so arranged as to secure comfort and decency. Besides a small garden, each cottage is usually provided with a pig-sty and ash-pit, and in some cases with a coal place.

The position and style of the farmer's dwelling also claim a remark here. The approved mode used to be to place it either directly in front or in rear of the farm-yard, on the ground that the farmer would thus have his premises and cattle under his eye, even when in his parlor or bed-room. As has been well remarked, "The advantages of this parlor farming are not very apparent, the attendant evils glaringly so. If the condition of ready communication be obtained, the farm-house should be placed where the amenities of a country residence can be best enjoyed." On all hands we now hear it urged that it is only by men possessed of capital and intelligence that the business of farming can be rendered remunerative. Those who desire to have such men for tenants will be more likely to succeed by providing a commodious and comfortable farmery, pleasantly placed among trees and shrubs, than by setting it down in the precincts of the dung-heaps.

## A DEVONSHIRE FARM.

We will now give a few figures relative to a farm of about 350 acres, in the west of England, which was in the writer's family for over fifty years. It comprised nearly 300 acres of arable land, 50 of splendid meadow pastures, and 15 of apple orchard, besides 150 of wood and coppice.

The staff employed was usually eight married men living in as many cottages, two occasional workers, and a carpenter who gave half his time; three young men, who were boarded in the house, and two female servants. Twelve horses were usually kept, besides fancy saddle horses, old veterans and colts. This is rather a large proportion of horse-power, but the farm was exceptionally hilly, and was a very trying one for horse flesh, the homestead lying in the lowest hollow of a deep

valley. Some 60 to 80 bullocks of all descriptions, 20 cows, about 400 sheep, and a small drove of pigs, made up the live-stock. The acreage of the grain crop yearly would be about 120 acres, two thirds being wheat and the rest oats and barley. The output of fat-stock would be about 15 fat oxen and 150 sheep, the pigs being usually cured at home. It is a custom to rent out a potato field to neighboring laborers and artisans in patches, and to do their needful plowing for them. The larger farmers have discontinued the practice of sending their dairy and garden produce to the cities, which is still done by the small cultivators. Hence, they prefer to rent out the land to disposing of a potato crop. The usual acreage of turnips was 50 acres, with 10 of mangold-wurzel. The production of turnip seed is an exceedingly profitable industry for those whose land is suitable.

The hay harvest in July would include about 20 acres of clover hay, mown on the uplands, and about 25 of meadow hay. The clover hay was used for horses, the meadow hay for the cows and fat-stock.

The yield of cider in a good year would be as much as 100 hogsheads. No crop is more uncertain. The production of cider is limited to one or two counties of England. When it is made on the farm, the laborer is allowed three pints daily, which he takes to the fields with him. Add to the above oak bark taken in May by the rippers (one of the gayest of agricultural employments), and the yield of the osier or willow swamp, and the factors of the farm revenue, without reckoning the minor produce that usually goes to the farmer's wife and children, are about complete. The figures of a good year would stand thus:

OUTGOINGS.	
Rent.....	\$2,000
Taxes.....	500
Fertilizers.....	1,000
Labor for the year—say, \$20 a week...	1,050
Special labor.....	200
Renewals of stock, implements, etc.	550
REVENUE OF A GOOD YEAR.	
Grain, 100 acres, returning \$30 per acre.....	\$3,000
12 fat oxen.....	1,440
150 fat sheep.....	1,500
Wool.....	600
Cider.....	200
Bark and minor produce.....	600
\$5,300	
\$7,340	

## SUGGESTIONS FOR AMERICAN FARMERS.

In the present depression of American agricultural interests, the writer may venture to suggest that there are two or three methods of enhancing the value of certain produce and rendering it more appetizing, that might advantageously be introduced in this country under certain circumstances. No better service can be rendered to farmers by the alliances that are now being organized than the carrying out, on a large scale, of the processes involved.

## WILTSHIRE BACON.

If all American bacon were cured in this manner, it would be too tempting to be excluded from any market. No comparison can express the superiority in flavor and temptingness of this article of the American. All the processes for curing bacon according to the various English methods will be found in Vol. XI. of the *Journal of the Royal Agricultural Society*.

## STILTON CHEESE.

This delicious article is the result of concentrating the milk by adding to each gallon the cream of a second gallon before it is curded.

## DEVONSHIRE CREAM.

The clouted or clotted cream of Devonshire commands a great price in the metropolitan cities of Great Britain. The following is the process of making it: About half a pint of water is poured into the bottom of each milk-pan, which is then filled up with new milk to a depth of about seven inches, the pan holding about four gallons of milk. After the cream has risen, the pan is placed on the stove over a slow, clear fire for the process of scalding; there it remains about half an hour, the temperature being raised to about 200° F., or just short of boiling. This process greatly increases the quantity of cream by causing more of casein to separate, and of course the yield of butter is pro-

portionately increased. This clotted cream is made into butter by merely stirring it with the hand in a tub, or by the usual churn. In the vicinity of the great cities of America, this clotted cream would be a very lucrative product.

Another Devonshire fancy product is junket. This is made by mixing a weak infusion of rennet in the best milk after warming it, when the whole is reduced to a jelly-like state. Cream is laid on the surface, coated with nutmeg gratings. [Continued in our next issue.]

## SUGGESTIONS FROM EXPERIMENT STATION BULLETINS.

BY JOSEPH.

AMOUNT OF FAT IN MILK.—The chemical division of the Cornell University (N. Y.) Experiment Station, in Bulletin No. 17, attempts to teach dairymen how to determine the amount of fat in milk for themselves, by a new method, Cochran's. A set of the whole apparatus, chemicals and six fat measures and six boiling flasks, will cost about \$7, and can probably be purchased of A. Marshall & Son, 220 North Fifth street, Philadelphia, Pa. The bulletin describes the whole modus operandi of analyses. Progressive dairymen, who desire to know more about this, should send for this bulletin 17. Address the Director of Cornell University Agricultural Experiment Station, Ithaca, N. Y. "If scrupulous attention is paid to every detail of the manipulation, as described in the bulletin," says Prof. G. C. Caldwell, the chemist of the station, "I think that any one who is not too clumsy-fingered, and is accustomed to nice, careful work, can get reliable results with the method, after some practice, such as any method would require. But in any case, a little training under the instruction of some one who is perfectly familiar with it would undoubtedly be profitable. With any such who spend a week at Ithaca, arrangements will be made, by special correspondence, for such instruction in the laboratory of the experiment station. Only two pupils at the most can be taken at once, and therefore this instruction will necessarily be distributed over a large part of the year, in case many should apply for it. All correspondence in regard to the matter should be addressed to the Chemical Department, Cornell University."

INFLUENCE OF SPAYING ON MILK PRODUCTION.—Bulletin No. 12, of the Arkansas Industrial University Experiment Station (Fayetteville, Ark.,) gives the results of some experiments made to test the truth of the statement frequently made that "spaying increases the quantity and quality of the milk" of the cows operated on. No definite conclusions can be based upon the results of the tests. The two cows selected for the experiment seemed to suffer little inconvenience from the operation; but spaying, thus far, seemed to have no effect on either quantity or quality of the milk. The station proposes to keep the cows, and again analyze the milk at the end of a year or so; and the results may be awaited with interest.

THE COTTON-WORM.—C. W. Woodworth, the entomologist of the Arkansas station, in the same bulletin, calls attention to the following points in the application of Paris green and Loudon purple for the cotton-worm: namely, 1. Do not apply except when needed. This useless waste of time and poison one sees during every cotton-worm scare. It is useless to poison a whole plantation, when, as is often the case, the worms are confined to a small patch or two. 2. Do not apply too much poison. A pound, or even a half pound, to the acre, is enough to kill all the worms that are ever found there. 3. Do not let a field or spot become ragged. Watch the fields carefully, and be prepared to poison as soon as the worms become at all threatening. 4. Apply the poison evenly. One pound all over the acre is infinitely better than ten pounds scattered around in spots. Be sure you poison every plant."

THE ENGLISH SPARROW.—Prof. C. B. Cook, in Bulletin 62, of the Michigan Agricultural Experiment Station (Agricultural College, Mich.), comes out with a forcible arraignment of this bird. Where there are but a few birds to the acre, he says, "the damage is slight; but when they number as many thousands, then they

become a serious nuisance. Buildings and shade trees that are constantly employed for nesting and roosting purposes become foul with their droppings. The injury to shrubs and trees, where these sparrows abound, is two-fold; first, by their filthy habits they injure the foliage; and second, they feed extensively on the fruit and blossoms. Where sparrows abound in large flocks, no fruit, grain or vegetable is safe from their attacks. Most large fruits are destroyed while in the blossom or soon after. The bird picks off two or three petals, and then swallows the young fruit. In this way a whole crop of apples, pears or plums has quickly been destroyed. Also, in the East, near some of the larger cities, it has been with difficulty that any grapes have been grown. The kinds of grain preferred are wheat and oats, which suffer the most at time of harvest." This and much more is charged against the English sparrow by Mr. Cook, and while true on the whole, yet I believe that the extent of the damage, so far as rural districts are concerned, appears somewhat exaggerated; and my own experience, both here and in Europe, makes me slow to fully accept the truth of the assertion that "if not held in check ere long, the bird will overrun the continent to such an extent that agricultural depression will be still further augmented." The bulletin also complains that many useful birds, among them the purple finch, the red-polled linnet, the yellow-bird, the song sparrow, the tree sparrow, the field sparrow, the chipping sparrow, are killed in Michigan, their heads presented at the county clerk's office, and a bounty of three cents per head collected, which Michigan law allows for the destruction of the English sparrow. This appears to me the most serious feature of the question, and an objection to bounties of this kind. "No one," says the bulletin, "should receive sparrows on a bounty or prize that has not thoroughly studied the bird. Far too many of the town clerks in Michigan do not know the English sparrow's head from that of a linnet or thrush. As a result, a great many birds that have been sent in for a bounty are our most beneficial birds. Thus, many heads have been sent to this station, on which a bounty was claimed, of such valuable birds as the song sparrow, red-polled linnet and evening grosbeak; birds that our laws protect by a fine of \$5 against their slaughter. We have a good law against destroying native birds, and every person presenting such a bird to the town clerk's office should pay the penalty, which is a fine of \$5."

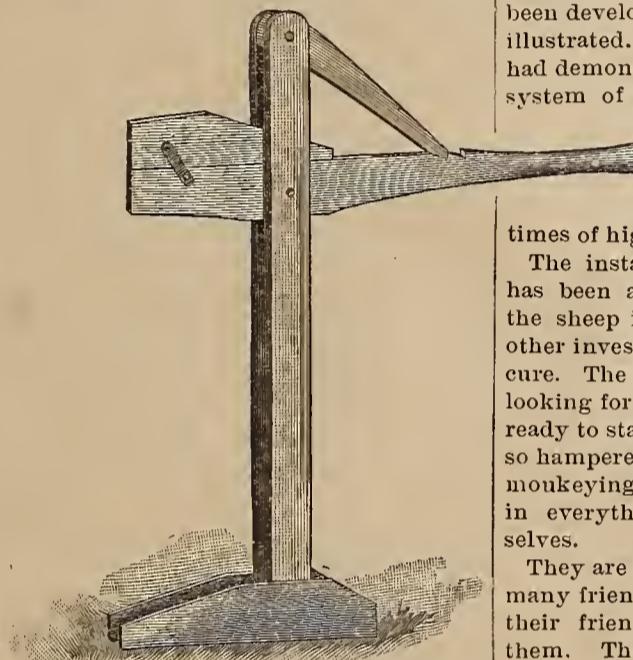
The following methods of poisoning are recommended: "Wheat, soaked in a solution of strichnine, in proportion of one drachm to a quart of water, is one of the most efficient poisons. However, experience shows that this compound is too rapid in its results, as some of the birds begin to be affected before all present have taken a fatal dose, and when once scared away by the dying agony of poisoned birds, the others never return. Arsenic, mixed with corn or oat meal in the proportion of one part of arsenic to ten or fifteen parts of meal, by weight, makes a less expensive poison, and is more slow in its action, thus giving all birds ample time to get away from the feed before they become affected. In order to obtain the best results, the birds should be fed for a few days at first, pure grain of the same kind that is to be poisoned. Great care must be taken not to let poisoned grain get in the way of children, domesticated animals or native birds. This is not difficult if it is carefully watched during time of exposure. One of the best means of keeping the sparrows in check is by destroying their nests. This may be done by every one, wherever the birds build, and if carried on in a systematic way, will help much to keep the English sparrows within bounds."

OAT VARIETIES.—The Agricultural Experiment Station of the University of Tennessee (Knoxville, Tenn.) reports, in Bulletin No. 2, Vol. III, some tests of varieties of barley, corn, oats, wheat and sorghum. Of oats, forty-three varieties were planted, and the great majority of them were found to be "not desirable for this region," "of no special merit," "quite ordinary," etc. The rust-proof varieties

were found best, as they ripen early, have strong straw, and are not so badly affected with rust as are other varieties of the large, coarse character of White Australian, Badger Queen, Iowa, etc." The following appear to be the same: Welcome, Clydesdale, Centennial, White Australian, White Bonanza, White Wonder. The older Probstice proved to be "a first-class variety, and to be recommended here, if rust is not too prevalent." The famous White Russian is described as follows: "Stem coarse but weak, fifty inches high, badly lodged; foliage, coarse, dark green; panicle inclined to one side, compact, twelve inches long; seed, small to medium, slender, medium long and heavy. A strong grower, but not more than an average yielder."

#### BUGGY-JACK.

The description here given is for a buggy; for a wagon, the jack would have to be of heavier material. The upright piece is 2x2-inch timber, 2 feet 6 inches long, with slot sawed out 12 inches deep. The lever is 2 feet 7 inches long, and 1 inch thick. It extends 7½ inches to the front; the piece that is fastened to the lever is 10 inches long, 3½ inches wide at the front



end, and back about five inches, and given a slope from there back; it is to be fastened on with small strips of iron, as shown in cut, so that it will work through the slot. The top lever is 12½ inches long. The bottom pieces are 1 inch thick, and are fastened on each side of the upright piece. They extend 16 inches to the front, and 5 inches to the rear.

E. B.  
Valley, Pa.

#### SOME POINTERS FOR SHEEP RAISERS.

There has been a steady improvement in the methods of sheep husbandry in the United States. These have not come to us in the way we looked for good things. They came unbidden, unlooked for. They came when we were needing them, in the hour of trial and distress. The old methods no longer led to success and prosperity. The mistakes and disappointments of the past were brought upon by the progressive age in which we live. The changes and developments in agriculture and commerce, just and irrepressible, by slow, unseen processes altered the whole situation; and sheep husbandry of the world, as well as the United States, felt the effects. We had failed to see the signs of the times and to "read the handwriting on the wall."

Successful sheep husbandry had fallen into certain lines with one consent and one purpose. All the eggs were in one basket. The day of trial came without a note of warning that could be heard. There was an attempt to show why all this distress came, but it was impossible to withstand the torrent. The foes were within as well as without. The numbers of our sheep rapidly decreased. Public confidence was gone and the scare passed away with the reduction of numbers.

When the situation could be seen it was found that some men had lost confidence and money, while others had been prosperous. The sheep had gone, but not to the "boiling pots." They had been sold in the mutton market for cash and were in large demand. How timely this

demand had come, and how little we had expected it.

It was found that a new era had come and that the prosperity of the present was in the men more than in the breeds. The relief was in our own hands to a greater extent than we had known of. The American wool grower was looking only toward "fleeces" as the means of escape from hard times. The idea of mutton had too little attention.

Merino sheep, pedigree, wrinkles and grease combined with prejudices and traditions of the past, had entirely overwhelmed us. The political refuge seemed likely to fail us. By the election of 1888 the bow of promise appeared across the horizon and sheep raisers understood themselves again. The tide of a new prosperity was begun.

They had been more scared than hurt, and confidence began to improve. The sheep business showed signs of life. The despondent were hopeful, the hopeful were enthusiastic, and then a period of prosperity was assured on a different basis. Some idols had been broken to pieces. Some theories had been left behind and abandoned forever. New lessons had been learned, new truths had been developed, new processes had been illustrated. The squeeze of hard times had demonstrated the weak points of our system of sheep raising, and the sheep raising and the sheep husbandry that could stand successfully in hard times is believed to be useful in times of high prices of wool.

The instability of national protection has been a nightmare and scarecrow to the sheep industry. Capital has sought other investment more promising and secure. The industry has been constantly looking for a scare, and on the least alarm ready to stampede. Sheepmen have been so hampered and bamboozled by political moukeying that they have lost confidence in everything and well nigh in themselves.

They are beginning to find they have as many friends as they ever had, and that their friends are as ready to stand by them. They feel more than ever, too, that there are unexpected and undeveloped resources within their own reach that have not been tried in the history of this country. More interest has been taken in diversifying and intensifying systems and ways of getting money out of sheep. The eggs are not all now in one basket. New ideas are brought to light, and the future no longer promises destruction nor even uncertainty, provided we are wise enough to follow the lines so plainly indicated before us.

The sheep husbandry of every agricultural country has had the same experience we have had and are having. There has come a time when altered circumstances required altered methods, and these again have required readjusting. The sheep that in the twelfth century made England the most conspicuous wool growing country of the world, under the changed conditions of trade and agriculture were changed into an entirely different animal. So of other European nations. We were at several times obliged to follow the same dictations of trade. Spain once was the fine-wool country of the world, as England had been, but was superseded by Germany and Austro-Hungary. England abandoned fine wool and avoided the competition of Spain by ameliorating her flock, and gave attention to the meat product and the growing of wools peculiarly suited to their uses, in which no nation has been able to compete. In their independence to meet a new demand upon them, they became the most independent.

No American wool grower can consent to be driven out of the business in our own markets. There have been times when the fear would raise the question in the minds of the most earnest sheep raisers. There never has been a time when the sheep owners of the United States did not protest against the foreign wool grower distressing us in our privileges and rights in these things. In the sections of the United States where wool of itself is no longer profitable, we find sheep are the highest in price and sheep

raisers are most prosperous. Is not this a pointer?

No intelligent, patriotic man who keeps sheep ought to oppose protection as entertained by the nearly entire body of sheep raisers of the United States. They feel the defeat of protection means their utter rout and ruin—as an outrage upon their rights. But the facts are plain: We are raising wool at a profit in some places and at a loss in others. It is a fact that cheapness of land and living favors the wool grower, and that this cheapness controls the situation. Hence, the protection that would effectually help Texas would not do any good for Massachusetts, because the conditions are so widely different.

These are not theories but are well-tested and admitted facts. This change of purposes in keeping sheep has been going on for years, and is certain to continue in this country. The adjusting of these things is opposed by well-informed men and has been for many years. It is the law of general business enterprises, and applies to wool growing as much as anything, that cheapness of production insures successful competition.

Competition is said to be the life of trade, but it is hard on those who cannot keep up with the procession. Just how long the high-priced East can compete with the low-priced conditions of the West no one can tell. The area of the latter region is steadily growing less and less.

The competition of wool countries is gaining steadily, and just how long they can keep it and how long we can stand it, or how much we can do to cheapen wool production, we do not now fully know. It is certainly a most important question now before the American people. Much is said of better management of flocks. This is not all there is to be considered. It is one thing to try hard, long and well; but it is necessary to try with such means as are most likely to succeed. It is said Mr. Jefferson once conceived the idea of a mill on the tip-top of one of the high hills of his beautiful Virginia estate. The project was well advanced when some practical man suggested the difficulties of getting customers to pull up that almost inaccessible hill with their grists, when they could use other mills with less disadvantages. That practical suggestion spoiled the wind-mill scheme of Mr. Jefferson.

Practical business sense must be used in American sheep husbandry. To do this many things are to be considered that were unnecessary in the past. Some of these are new to the present generation of wool growers and sheep raisers. What are they? It is the most pertinent question sheep raisers have to consider. Why is not sheep raising, and particularly wool growing, as profitable as in the past? What is the matter with wool growing in the United States?

Wool growing, the prime object of sheep raising, is not all the object of keeping sheep, and as a first consideration is rapidly being placed in the second place, with the meat production first in importance.

Sheep raising has a permanent place in American enterprise. It is of increasing importance with the agriculture of this country. It is fostering good farming in every country. It will continue to do so, and there is no thought of abandoning sheep. The profits may be less satisfactory than in the prosperous times of the past, but greater intelligence will show the way to success.

Should it be that foreign wools can be put down in the markets of this country cheaper than the domestic fleeces can be grown, sheep will still find a home on American farms and the ranges and cheap lands of this country can find the means of successful sheep raising. There certainly are conditions so favorably adapted to wool growing in this country that they can successfully compete with the world. It is the settled policy of the American people to foster wool growing, and it is the practical meat protection that can aid in protecting the fleece, with the aid of congressional legislation.

The problem must be solved not alone by one, but by all the means of protection. National, state, local and individual enterprise, thrift and economy must be practiced with energy and persistence. The friends of domestic wool are a unit, and believe in the business so important to national existence and prosperity.

R. M. BELL.

## I'm So Hungry

Says  
Nearly Everyone  
After Taking  
A Few Doses of

Hood's  
Sarsaparilla

## Our Farm.

## FARM AND GARDEN ECHOES.

BY JOSEPH.

**H**E FRUIT CROP.—Every report coming in from the chief fruit sections only renders the outlook more dismal. Of tree fruits, there are next to none this year; so that apples and pears, not to speak of peaches and plums, will cost much more next fall and winter than average people can afford to pay for them, even as medicines. In short, fruit will hardly be a regular dish at every meal in many families, and I can only repeat the advice to carefully husband anything we may have in the shape of fruits, and also to lay in a larger stock of vegetables, in cans or otherwise, for use during winter and early spring, than we have been in the habit of doing. Of course, there will also be a great scarcity of dried fruits, and we should not make much calculation on our ability to buy such at the stores at anything like a reasonable price. I also expect good prices for honey, as this article will in many cases be required as a substitute for fruits. The scarcity of the latter cannot possibly be without reaction upon the honey demand and honey prices. Prudent people will bear all these things in mind, and make their preparations accordingly.

But what has become of our alleged *overproduction* of fruits? A single, comparatively general failure of the crop shows itself able to clear our markets of evaporated and canned fruits, and compels us to go without, or make use more largely than ever of tropical fruits. I consider it at least doubtful whether California will have enough fruits for us all, and if she had, the excessive expenses of transportation clear across the continent would keep them above the paying capacities of average eastern people. I know that the apple crop in many parts of Europe is a failure, also, but I hope that tropical fruits in foreign countries will help us out. I believe in the free use of fruits; perhaps I might be called a little "cranky" on this subject. Plenty of fruits, I think, will improve people's health and morals, and minister to their enjoyment of life; and just for this reason I am bitterly opposed to any tariff on foreign fruits. I think, for this season, at least, the idea of putting a high import duty on fruits of any kind will not appeal very strongly to the favor of the masses who have learned to like and appreciate fruits, foreign as well as domestic.

**T**HE POTATO CROP.—Things look decidedly blue at this writing, although the sky is overcast with clouds. There does not seem to be a particle of moisture in the soil, and notwithstanding the most magnificent stand of vines beheld in a good while, I fear the crop will be light, unless rain comes very soon. Even then the yield would be but a fraction of what it might have been had the rain not failed us just at the time when needed most.

Potato bugs have not given us near the trouble this year that they have in former seasons. No need of speculating on the cause of it, so long as we can enjoy this comparative immunity from bug attacks. I believe in a season when bugs are not more plentiful than in this, Mr. Terry's plan of hand-picking might work well enough. As it is, the job of fighting the bugs has been easier for me than in any year during the last decade, or more.

Accidentally (by way of purchase at an auction), I had come in possession of a barrel of Hammond's slug-shot. I also got hold of a better and more convenient poison distributor than I ever handled before, in the "Farmer's Favorite Potato-bug Exterminator" (Eddy's patent). The slug-shot is an arsenical preparation, thoroughly mixed, and I was less averse to handling it than to prepare and apply the usual Paris green mixture. I applied the slug-shot very liberally on potatoes, even on the tender foliage of seedlings, on melon and squash vines, etc., but I have not noticed the least harm done to the foliage in any case. At the same time it speedily cleared the plants of the potato slugs. Whether it was effective against the yellow-striped cucumber beetle or not,

I am unable to say just yet. Altogether, I think highly of the slug-shot, but its cost at regular rates would probably be an objection. If I could get it at same rate as this one barrel (\$2), I would use no other insecticide. Of course, we can make a preparation just as safe and effective as this, if we would get the best quality of Paris green and mix it more thoroughly than is done in 999 out of 1,000 cases, with a sufficient quantity of plaster. The poison will bear more dilution than generally supposed, but it should be evenly distributed all through the diluting material. What we need is a simple device for making intimate, thorough mixtures of poison with plaster or similar substances. Thorough work in mixing is not often and not easily done with shovel and hoe on the barn floor, or in a box.

The poison distributor spoken of makes the work of applying such poisons very easy and less dreaded. It is kept in stock by most seedsmen and supply dealers, and costs \$1.50 at retail. It is a good thing.

## Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

## NOTES ON STRAWBERRIES.

We indorse plaiting of new fruits, but do so on an economical basis; every strawberry grower should spend some money each season for new plants, fruit them himself before planting for commercial purposes, then he knows just what he is planting on his soil.

We were more favorably impressed with Cloud's Seedling this season than ever before, but it has no merit over the Crescent, except that it is more firm and holds its burr in picking. It is of the same class, but Crescent will produce three times the amount of fruit.

The following varieties are as good or, perhaps, better than the old, and those who have plaited them this season are in luck: Warfield No. 2, Haverland, Bubach No. 5, Gandy's Prize, Pearl and Stayman No. 1. There are others that may be just as good, but we would not recommend growers to plant them for field culture.

May King—Somewhat like Crescent and after the nature of the Cumberland, uniform in size, but too soft to use as a fertilizer, early, but not so productive as Crescent.

Glendale—Size fair, very firm, good shippers and fertilizers. A late variety, quality not of the best, fairly productive for a late kind.

Ontario—Size large, vine healthy, but we can see no merits worth mentioning over many others.

Manimoth—Large but irregular in shape; not profitable to grow.

Summit—Size large, very late, productive, but fruit too soft to ship. Our vines are very full this season of fine fruit.

Belmont—This variety is the most profuse bloomer we ever had, but will not produce its fruit. In rows fifty yards long it will have spots of fine fruit and others of buttons. This has always been its trouble with us, but it will make a good fertilizer, as it produces much pollen.

Jessie—From our experience with Jessie we would not recommend any one to plant it. It produces some fine fruit at first, but lacks in amount and runs to buttons after second picking. From reports from other localities we believe that on some soils the Jessie will do well, but I have yet to hear a favorable report from my own county. It will make a good fertilizer.

Monmouth—Early, size good, quality fair, not so productive as some others, but it has the merit of being early, firm and of good color. I think more of it than of the Jessie.

Crawford—Very large, a good grower, quite firm and of much promise.

Eureka—Late, size but medium, a good grower. We expected more from this variety, but will not condemn it until tested longer. It is all one wants in growth, but not in fruit.

Florence—Size medium, growth of vine and fruit fair.

Mrs. Cleveland—Size fair, excellent grower with good vine, color light, with white flesh, but fruit not as good in proportion to growth of plant.

Townsand No. 3 (not introduced)—Very large, a good grower and very productive. It gives the greatest promise of any seedling on our grounds this season.

Ohio Centennial (not introduced)—From Townsand. It is a good berry, vine not so robust as that of Mrs. Cleveland, but superior to it in fruiting qualities.

Crimson Cluster—Size large, quality fair. For commercial purposes, it is too soft and too light in color. It grows well when planted in hills and will do for home use.

Bubach No. 5—One of the best. Size, large to very large. It makes a fine growth; the foliage is very healthy. We fruited it this season on four different soils and it was excellent in each instance.

Gandy's Prize—Of large size. It holds its fruit well up from the ground, and is the best late berry on the market that we have any knowledge of, except a seedling received from John Little, of Ontario, Canada.

Pearl—Large, quite firm, a good grower, productive, of good color. We think well of it.

Burt—As with us last season, the Burt did well and we would not hesitate to plant for fruiting on moist, deep soil. It is large to very large and good producer of fine fruit.

Hampden—Poor in vine and fruit.

Haverland—One of the most, if not the most productive strawberry. Early, size good. We can recommend this for field culture.

Gold—Late and of little or no value.

Bomba—Early. Its first fruit is very large, color good; it runs small at last of season and it is soft. Were it not for this fact it would be very valuable, as it is a heavy fruiter.

Logan—Size, large to very large; color good, vine a good grower. We think well of it.

Lida—Very productive with us this season, large, but a little on the soft order. We think well of it.

Itasca—Very productive, but it runs small after the first picking.

Little's Seedling No. 6—Extra large and productive, ripens in midseason, vine a good grower. It promises well.

Warfield No. 2—We place this with Bubach in first place, as it is of the very best, size large, holding its own better than others throughout the entire season and being very productive.

Cloud—Size fair, a good grower, vine strong. It holds its burr, which is a point in its favor for shippers. Were it as productive as Crescent or Wilson, we would heartily say, grow Cloud.

Pineapple—As for a plant it is the best, but for fruit it is the nearest no berry we ever grew.

Carmichel—The Carmichels this season are very fine, and those who have beds will make a stake, as they are very full and selling at double the price of other varieties, owing to lateness, but if not on soil that suits them, they may not be so prosperous.

Crescent—Held its own in its class and proved to be the most paying berry we grow, as it ripens more fruit the first picking and continues to yield more fruit than any other variety, perhaps excepting the Haverland.

Cumberland—If you have a soil that will suit it, it is the best paying large berry grown, holding its size through the entire season. It is of a good color on soil that suits it, but is poor and soft elsewhere. It is one of the berries that seem to grow better each season instead of going the other way. A poor clay soil suits it best.

Sharpless—We have stopped trying to fruit this berry for profit, as it is too uncertain and easily killed by the frost.

Chas. Downing—A good shipper, but uncertain. In some localities it is very desirable.

Manchester—Resembles Cumberland somewhat, but is not so good.

Wilson's Albany—We are about the only ones growing the Wilson in this county, but will say if there were more Wilson grown, better returns would be netted per acre than in many cases are. Some growers claim the Wilson runs out. It is not so with us, and we will still grow it. The vines are as healthy and productive

as ever. It is the best all-around berry for family use we have.

Stayman No. 1 (from Kausas)—We are highly pleased with this, both in fruit and vine. It holds its fruit stems well from ground, has a fine plant and is a good grower.

E. W. REID.

Belmont county, Ohio.

## INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

**P**ropagating the Dewberry.—E. B. H., Stone Station, Montana, writes: "Please tell me how to get dewberry sets from plants that have been set out two years."

**R**EPLY:—If the tips or young growth are covered with soil, as with black caps, or simply layered, they will root very readily.

**P**runing Apple Trees—Apples Falling Off.—J. L. R., Marksburg, Ky., writes: "When is the best time to trim apple trees?—What causes green apples to fall off the trees?"

**R**EPLY:—The best time to prune apple trees is some time after the leaves are well expanded and before much growth has taken place; the wounds then heal over at once. If the pruning is done earlier, while the sap is running freely, the wounds are apt to start decay, which results in serious injury. Pruning may be done in the fall or winter with good results, provided there is time for the wood to dry up and become impervious to moisture. In pruning, cover all wounds over half an inch across with wax or paint.—It may be that your apples fall off because there are more than the tree can mature, or perhaps they are affected by some insect, such as the codling moth.

**A**pple Blight.—H. C., Cottonwood Falls, Kan., writes: "Some of my finest and thirstiest young apple trees seem to be dying. The leaves and apples shrivel up as if they were cooked. The disease commences with the terminal leaves, and spreads all over the tree. In time, the bark dries. They are in good, cultivated soil, but the ground is hard, for we have had no rain or dew for three weeks. I have been cutting off the dead portions, but it seems to do no good."

**R**EPLY:—Your trees are probably troubled with what is called "blight," a disease which is very prevalent throughout the Mississippi valley this summer. The only thing you can do is to cut off the diseased growth and burn it. Orchards that are much protected are more subject to it than those having a good circulation of air. Some varieties are more affected than others. We have had sometimes a few weeks or few seasons when it has been especially prevalent, and then a long period of comparative immunity from it.

**B**orers.—W. R. C., Hope Valley, R. I., asks: (1) "What is the size and general appearance of the insect termed borer, which sometimes does great injury to young fruit trees?" (2) "When small, round holes appear in the trunk, is this an unmistakable sign that the insect has commenced depredations?" (3) "What remedy should be used?"

**R**EPLY:—(1) Each class of tree, almost without exception, has a borer peculiar to that class, and some kinds have several sorts of borers preying on them. The peach has a borer which attacks not only the peach, but sometimes the plum. The flat-headed apple borer also attacks the pear and wild thorn. The gooseberry is attacked by the same insects that injure the currant. In a general way, all borers look like a white worm which bores into the wood or bark and lives on the tissues it finds there. They can generally be found in all old and neglected apple trees, and you had better look them up. They vary much in size, according to age and species. A full-grown apple borer is about three fourths of an inch long. (2) Yes, it is an unmistakable sign. If the hole is full of chips (or horings), the borer is still in the tree; but if the hole is clean, it is generally because he has passed through his transformations and escaped. (3) The best remedy is prevention by painting the trunks of the trees with a whitewash made of plaster of Paris and containing about five per cent of Paris green. The trees should also be looked over once in the spring, summer and fall, and whenever a borer is found it should be dug out or killed with a wire. If much cutting of the tree is necessary, all the wood should be covered with grafting wax. If the work is carefully done, the borers will be taken out before being large enough to do any serious harm.

## "AMERICAN "NOSOLOGY."

There can be no doubt as to the almost universal prevalence of Catarrh in this country. Even our speech has acquired a nasal twang. And this is not, as might be supposed, "The twang that spoiled the hymns when Cromwell's army sang," but it is undoubtedly a catarrhal symptom. In most medical works at the present day the nose is very "prominent." The "fierce Catarrhs" continue their ravages. But, is nothing to be done? Is there no remedy? Let us see.

**D**RS. STARKEY & PALEN:—"After suffering many years with Catarrh, and trying many remedies, I found greatest relief in the use of your Compound Oxygen Treatment, and I highly recommend it to others." MRS. J. C. ARRINGTON, Livingstone, Ala., March 1, 1889.

**D**RS. STARKEY & PALEN:—"Your Compound Oxygen cured me of chronic Catarrh. I have great faith in it for the throat and lungs." T. P. DICKERMAN, New Haven, Conn., March 25, 1889.

You will find a great number of testimonials from patients who have been cured of Catarrh and other diseases, in our treatise on Compound Oxygen, a book of 200 pages, giving full account of the discovery, nature and results, of Compound Oxygen. It is a book well worth reading. The only genuine Compound Oxygen. Address DRS. STARKEY & PALEN, 1529 Arch street, Philadelphia, Pa., or 120 Sutter street, San Francisco, Cal.

## Our Farm.

## CONDENSED MILK.

CONDENSED milk is made as follows: The milk, as soon as drawn, is taken by the farmers to the dairies, which are established in each village or group of villages. The dairies are run by a syndicate with which the manufacturers deal, and establish the fixed prices. Here the milk is cooled. On reaching the factory, the milk is warmed for the first time in a water bath, and a second time in copper vessels, where the temperature reaches eighty degrees centigrade. It is then sweetened by adding the best quality of sugar in the proportion of thirteen to one hundred in weight, the sugar being forced into vacuum pans by means of a pump. These vacuum pans are for condensing the milk, and are similar to those for condensing the beet root, having a double bottom and spiral pans, in which the steam circulates. The water contained in the milk is removed in the form of vapor by means of a jet, which is connected with the top of the vacuum pan, and which is operated by means of a pneumatic pump. When the milk has been sufficiently condensed, it is removed from the vacuum pans and cooled in vessels placed in reservoirs of running cold water. It is only necessary now to pack the milk into tin boxes, cylindrical in shape and hermetically sealed, the box and contents weighing one English pound, and being in condition for shipment to any part of the world.

In the preparation of the condensed milk, it may be observed that the milk, as taken directly from the cow, has on the one hand simply been deprived of the water it contained, while on the other hand, the only addition consisted of pure sugar, which is designed to preserve the milk better. It contains all the elements of the fresh milk, which has practically undergone no modification, the boiling of the milk under slight pressure having never passed eighty degrees centigrade. It can be affirmed, therefore, that the condensed milk possesses all the nutritive qualities of fresh milk.—*La Nature*.

## FIG CULTURE IN NORTHERN CALIFORNIA.

All varieties of white, green, yellow, brown and black figs ever planted in this northern end of the Sacramento valley are an unqualified success. They all yield two crops per year, and would bear the second year if permitted. The first profitable crop is the fourth year, after which the yield increases rapidly. The cuttings are usually set in nursery row the first year, and transplanted into the orchard the second. The trees soon grow to a large size and yield heavy crops. No protection is given here to fig orchards. The figs are cured in the sun, and could not be of better flavor. Most all our horticulturists consider the White Adriatic the most profitable variety. The Brown Turkey is also held in high favor. The lowest temperature ever known here was 20° above zero; this, coupled with the fact that the heavy frosts only come in December, January and February, combine to make this one of the very best sections for fig culture.

MARION GRIFFIN.

Shasta county, Cal.

## EXTRACTS FROM CORRESPONDENCE.

FROM PENNSYLVANIA.—Crawford county is situated in the north-western part of the state. We had a very rainy fall, winter and spring. Since the middle of June we have had more dry weather. The hay crop is good, but oats are almost a failure. This is the first failure of oats through here for a number of years. Potatoes, as a general thing, look well. Corn never looked better. There was a fine wheat crop this year. There are very few apples and pears and no peaches, but plenty of berries of all kinds.

F. C.

Venango, Pa.

FROM KANSAS.—I enclose you specimens of Kansas timothy, all pulled in a space of less than two square feet. I send them to show that our Kansas friend was mistaken about tame grass in this state. You will notice considerable difference in the diameter of the heads. This was caused, I think, by a dry spell of nearly three weeks, which set in just as the grass came in bloom.

A. G. C.

Millwood, Leavenworth county, Kan.

[The timothy you send is large and fine. It is well understood that timothy and clover do well in portions of Kansas. Your county is in

the north-eastern part of the state, while Stafford, the county which the correspondent you refer to speaks of, is in the south-central part. This may account for the difference between you.—ED.]

FROM NEBRASKA.—Webster county lies in the southern tier of counties, about one hundred and fifty miles from the Missouri river. We have had a very dry year so far. Small grain is almost a total failure, corn is getting badly dried, and if we don't have rain soon, corn will be completely dried up. Our soil stands drouth wonderfully. Farmers are getting poorer every year raising and selling grain. Some who have been in the stock business have done fairly well. Our climate is delightful, and with the exception of the strong winds is all that the heart could desire. This has been a very warm summer; so warm, in fact, that we can get but little sleep. Lately, the heat has ranged from 95° to 110° in the shade. Several days it has been 95° at sundown. Taking all things into consideration, this is about as good as most other countries.

J. R. A.

Coulter, Neb.

FROM WEST VIRGINIA.—The hay crop is exceedingly large this season. The wheat crop is the lightest it has been for several years. Steam threshers are now employed by a large majority of the farmers, and threshing is done a great deal faster than by the old way. The oil excitement is rather strong in this county. Several wells are being drilled, but as they are not finished it is hard to tell whether there is oil or not. If these wells come in "gushers," it will be a big boom for Tyler county. The directors of the Tyler County Exposition and Fair Association will hold their eighth annual fair, September 3, 4 and 5, 1890. The prospects of a big fair are encouraging. The directors will endeavor to make the fair as enjoyable to visitors as possible. Persons wishing premium lists will receive the same by addressing, Secretary Tyler County Fair, Middlebourne, W. Va. The markets at present are not very good. Eggs are worth 10 cents per dozen; butter, 8 cents per pound; chickens, 5 and 6 cents per pound; chickens (young), 10 cents per pound; corn, 60 cents per bushel; oats, 40 cents; wheat, 90 cents; beans, \$1.50; cattle, 2½ and 3 cents per pound; hogs, 3½ cents per pound; lambs, 4 cents per pound; calves, 3½ cents per pound, and sheep, 3½ cents per pound. Horses are selling from \$80 to \$120. Of course, the above prices fluctuate with the Wheeling markets. Fruit is scarcer this season than it has been for many years. Blackberries were always plentiful and sold for 15 cents per patent bucket, but they are selling this year for 60 cents per bucket and are very scarce at that. We have no cyclones or blizzards in this county, and it is the most healthful of any in the state. Lands are generally well watered and well adapted to sheep grazing. This is a very good country for emigrants.

C. H. R.

Middlebourne, W. Va.

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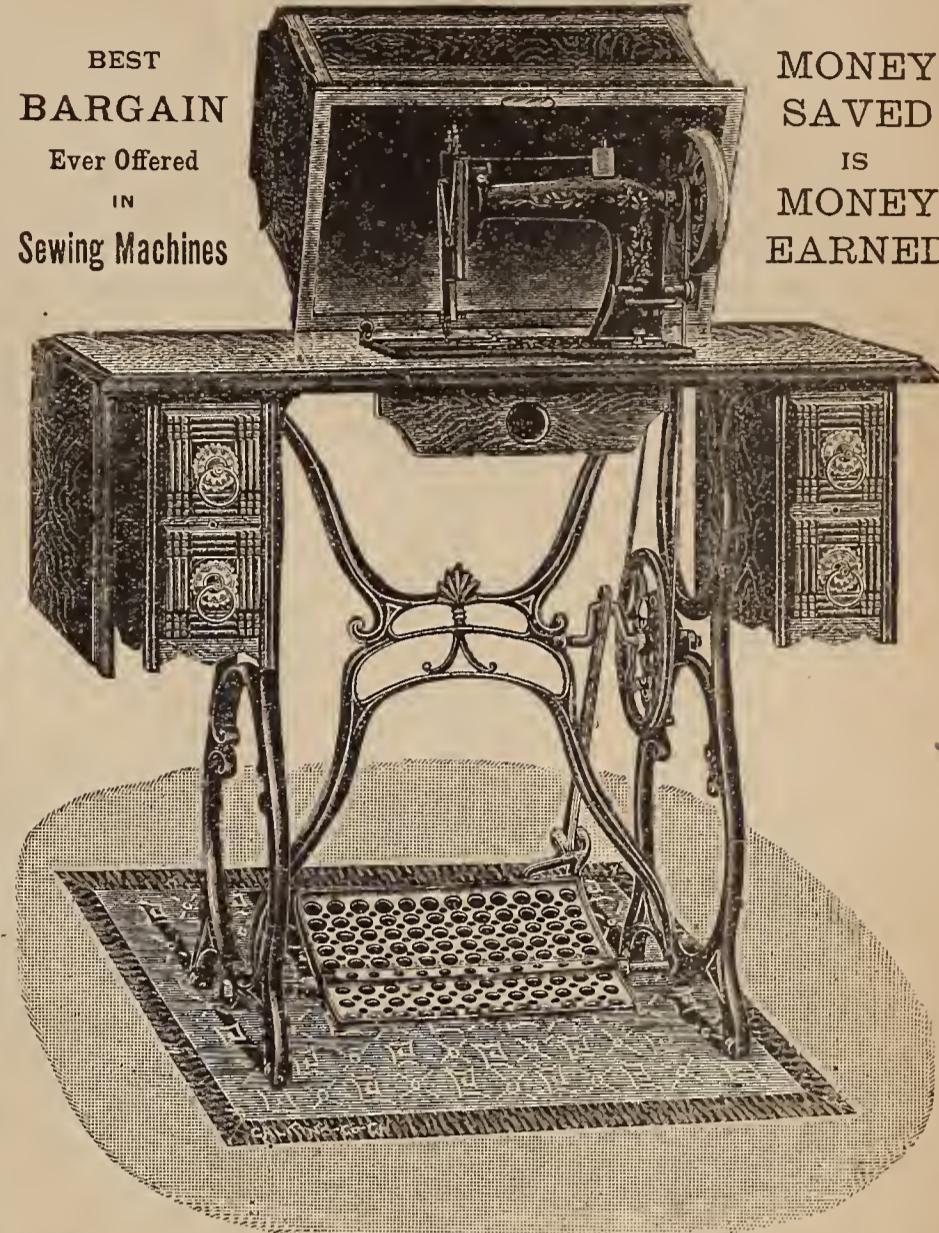
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## Our Fireside.

## ONE YEAR AGO.

ONE year ago, and all my heart was glowing  
With bliss so full, so sweet,  
That not one joy could crown its overflow-  
ing  
To make it more complete.

I surely think if God to me had granted  
Upon my wedding day  
Full leave to add whatever good I wanted,  
I would have answered: "Nay,  
Thon canst not heap upon me any blessing  
That hath not yet been given.  
My crowded heart can hold no more, possessing  
All hope for earth and heaven!"  
To-day—to-day, disrowned of all my gladness,  
I crush the sobs that start,  
And quiet down the rush of speechless sadness,  
And sit and break my heart.  
To have him snatched from such a realm of duty,  
From dreams and plans of bliss;  
To see him go, in the supremest beauty  
Of such a life as his—  
How can I hear it? Nay, how have I borne it—  
Alas, grief doth not stay!  
Or I had not been here to meet and mourn it—  
This sad memorial day.  
Whatever be the pain, alone I hear it;  
Content that soon or late,  
Whatever be the bliss, we both shall share it.  
God help me while I wait!

—*Harper's Bazaar.*

## One Experience of "La Grippe."

BY A. C. PHELPS.

**G**REE times ringing ought to bring some one," soliloquized Gertrude Porter, as she gave the bell another vigorous pull. "Wouldn't it serve me well for not writing, if they were all away? Or perhaps they have that new disease I heard so much about this morning. I hope not, for I'm hungry. There comes some one now."

The door was opened by a woman wrapped in a shawl, looking the picture of despair.

"Gertie, Gertie, I am so glad to see you!" she exclaimed with a little animation.

"I thought you would be. But what is the matter? Have you the grip?"

"Yes, we have," was the doleful reply. "And don't laugh; it has passed that stage, and is now a serious matter. Mother, father and the boys are in bed."

"I heard people talking, while I was waiting for the street-car, about so many being ill," said Gertrude, "but we had not thought anything of it at home."

"We hoped to escape, as we are in such a healthy locality," groaned Mrs. Upton; "but we are all down to-day."

Gertrude had taken off her wraps.

"Lie on the lounge, Cousin Annie," said she, "and tell me all about it."

"Mr. Upton wanted breakfast early this morning, and found that Norah was not able to prepare it. I told him I would do so, but was unable to dress. Then we found father, mother and the boys in the same condition. We thought of the grip, and John went out and sent in Doctor Peters, who said we would be all right in a few days if we kept in the house. I thought I might be able to go for the medicine, but had to give that up."

"I will go for it myself," said Gertrude. "If Cousin John comes back before I do, he can stay with you until my return."

"I am afraid Gertrude will get lost," called Mrs. Rich.

"But if the doctor orders the medicine you must have it," laughed Gertie. "I shall find my way all right. I have a tongue."

"And I think you know how to use it," remarked Mr. Rich, dryly.

"I hope I do, Uncle Sam. Wouldn't give a cent for a girl who didn't. Take the car to Sixth avenue, then turn to the right. I'm off."

Gertrude felt that with so many ill she must do something, and to procure the medicine was her first duty; but she professed more courage than she felt. However, she took the first car she met, leaving it at Sixth avenue, as directed. No car to be seen going to the right.

"She said it was only about fifteen minutes' walk from the corner," reflected Gertrude, "so I will not wait."

Ten minutes of very rapid walking, and then, thinking she must be very nearly there, she said to a policeman:

"I want to find Frank Smith's drug store. Can you tell me where it is?"

"Well, miss, you're on the wrong road entirely. Just turn about an' head yerself the other way for half a mile."

"Half a mile the other way? Then I must have gone wrong when I left the car. Yet I thought she said the right hand."

"Can't say as to that, miss; but you just walk the other way for a matter of twenty minutes, and you'll see his sign all right."

Gertrude retraced her steps, then walked for ten minutes longer, and found the sign, just as the jovial policeman had said. But it read "H. F. Smith."

"I must be wrong again," exclaimed poor Gertrude, in dismay.

However, she went in.

"Is this Frank Smith's drug store?" she inquired of the clerk.

He hesitated.

"This is Henry Frank Smith's. There is a Frank Smith who keeps a drug store a mile below."

A glance at the careless disorder of H. F. Smith's store, and Gertrude quickly decided to retrace her steps. This time she took a car, and arrived at her destination without further adventure.

"Prescription number one I want immediately," she said, handing several papers to the sorrowful looking attendant, "and as the others will take some time to prepare, I will call for them in the morning."

He read them each one, deliberated, coughed, looked them over again, sneezed, and finally inquired:

"Who wrote prescription number one?"

"Doctor Peters wrote them all."

"Why did he not [cough] sign his name to this one?" and he eyed her suspiciously.

"I did not know that he had not done so," said Gertrude.

"The name is not here; and I cannot put it up without his signature. If Mr. Smith was here—but he is sick and at home," and the gloomy clerk looked gloomier than before.

"I don't know what I can do," said this young country girl, almost in despair.

"You can probably find Doctor Peters by going to the hospital," suggested the clerk, brightening a little under the influence of an original idea. "He was to be there for an operation at one o'clock, and one means two, nowadays. If you go now you can get there at three, and you'll catch [cough] him, I'm sure." Gertrude thought a moment. She was both hungry and tired, but determined not to return without the medicine.

"Well," she said at last, "if you will direct me, I will go and come back as soon as possible."

She took the cross-town car, as directed, but getting out at the avenue became confused, taking the car up instead of down, and only learned her mistake after riding for some time by noticing the numbers of the streets. Thoroughly discouraged, she took the next car back to Forty-ninth street and tried again. Which way to go she now had no idea, but ventured to inquire of an old lady.

"I'm going to the hospital myself, miss," was the kind answer to her question. "But it's a long walk. It's on Sixty-ninth street."

Could it be possible that the druggist, too, had made a mistake? She saw a policeman, and though her faith in those officials was considerably diminished, once more applied for information.

"I was told there is a hospital on Forty-ninth street. Can you show me which way it is?"

"Doctor Peters has a private hospital two blocks farther down," was the cheering response; and this time the hospital was found.

"Doctor Peters? Oh, yes, miss, he's here, but he is engaged just at present," smiled the dapper little clerk. "Step into the reception room and I will tell him as soon as he comes down."

Gertrude obeyed, sinking into the first easy chair with a dim kind of wonder as to whether she would ever have the strength to rise again. For the first moment since leaving her home, early in the morning, she had leisure to think of herself and her disappointments. She was only a girl, and had built many air castles about her first real visit to the city. "La grippe" had not reached her country home, and no thought of that epidemic had marred her bright anticipations. Now, poor, tired, hungry child, her head was drooping, her eyes almost closed, when she was roused by the clerk's voice in the hall.

"Young lady to see you, doctor, and she looked very much distressed."

"Some one got the grip, doubtless. Wants a little medicine and more sympathy," was the unsympathetic rejoinder.

Miss Gertrude was quick tempered. As the doctor opened the door, he was surprised to see the "distressed-looking young lady" spring to her feet, and with a voice trembling with indignation, exclaim:

"I have not caught the grip, and I want neither sympathy nor medicine. If I needed either I wouldn't go to a doctor who makes such blunders as you do here!"

He glared from her flushed face to the paper she handed him in amazement, if not amusement, as he took in the situation.

"Have you been to the druggist's?" he inquired.

"Indeed I have, and the clerk wouldn't give me the medicine. And I have been hours and hours in finding my way here. It seems to me very careless, and if I were Mr. Upton, I wouldn't dare take your medicine."

"It was a blunder," said the doctor, apologetically, as he signed the paper. "I am sorry you have had so much trouble," and he turned toward the door.

Gertie's wrath flamed up afresh at this summary dismissal of her troubles.

"It was all your fault," she exclaimed, almost ready to cry with anger and fatigue. "I—I think you ought to take me back to the druggist's."

There was no doubt as to the amusement in

his face this time, as, after a moment's hesitation, he announced:

"I have an errand to the druggist's myself, and should be very glad of your company."

That ride in an easy carriage, with no thought of the way to trouble her, was very different from the morning's anxious journey in the street-car. Little by little Gertrude's anger subsided. Before the first half mile had passed, she had decided that the doctor, in spite of the fact that his brown mustache was tinged with gray, was nice looking, and even began to wish he would stop writing, and give her an opportunity of effacing that first unpleasant impression. At length, seeing her watching him, he inquired, politely:

"You were not at Mrs. Upton's this morning?"

"No, I left my home in Smithville before six o'clock. When I arrived at my cousin's I found the family ill, so went for medicine; and," flushing deeply, "I did feel really angry to hear you say I wanted sympathy; I had been running about the city for four hours."

"Owing to a blunder of mine. And haven't had a mouthful to eat since six o'clock?"

"It was not five when I pretended to eat my breakfast," corrected Miss Gertrude, a little maliciously. "I thought I should have lunch at Cousin Annie's, and—"

"I don't wonder you felt yourself abused; but here we are," laughed the doctor, as the carriage stopped. "Stay here. I am going in, and will do your errands for you."

Returning quickly with the medicines, he stepped to the next door for a moment, and brought out a glass of milk.

"Drink this at once," he said, authoritatively. "And you can eat your lunch," producing a package, "on the way. I am going to see you safely at your aunt's."

When Mr. Upton returned after an absence of more than three hours, he found the sick ones all anxious for Gertie's arrival. His wife worried, the boys impatient and Mrs. Rich almost in hysterics at her long delay.

"Druggists are very busy nowadays," said he. "Short of help, so many are sick. Gertie might have had to wait an hour or more for the prescriptions, and it was so far, I presume she thought she would get them all at once. I have been looking for a nurse, but there are none to be had. So she and I must take care of you yourselves. I'm glad she's here."

"But she's not here," corrected Mr. Rich, "and we don't know where she is."

"Oh, she'll be all right, father. The police will bring her back if she gets lost."

"John!" shrieked Mrs. Rich from the adjoining bed-room. "What excuse could we make to Sister Angelina if her daughter should be brought home by the police? And it might get into the papers!"

But she had hardly time to realize the full enormity of the idea before the door opened and Mrs. Upton exclaimed:

"There's Gertrude now!"

Instantly there was a chorus of ejaculations.

"Where have you been?"

"Were you lost?"

"Did you get the medicine?"

"Could you find a policeman?"

"Half a dozen," laughed Gertrude. "And they didn't know any more about New York than I did."

Then she gave them a comical account of her pursuit of Doctor Peters. When she told how she asked him to take her to the druggist's, Mr. Upton shouted with laughter.

"Gertie, Gertie!" he exclaimed. "I should as soon have thought of asking the president to take me there. His time is worth—I don't know how much. I should not have gone for him, but I met him out here, and doctors are all so busy now that I asked him to stop."

Gertie gasped.

"And I talked and scolded just as if he were the most ordinary man in the world!" she exclaimed in comical dismay. "How did I know he was a great doctor? He didn't look like one, and he certainly didn't act so. I thought he couldn't be very clever to make such a mistake as that. Oh, dear, oh, dear!"

Three days found the "grippe" patients progressing finely, and nearly all well but Mrs. Rich, who had the doctor for over three weeks.

Gertie took care of her, and would, as she afterward declared, have covered herself with glory as a nurse had she not fallen ill with the epidemic herself, just as Mrs. Rich became convalescent. Doctor Peters had a hard fight to keep her from pneumonia, and the last two weeks of Gertie's stay in New York were passed indoors.

When Mr. Upton received his bill for Doctor Peters' services it was so moderate that he called on him for an explanation.

"There must be some mistake, I think," he said.

"No, no mistake. I am only making amends for the only blunder I know of having committed in years. By the way, have you heard from Miss Porter since she went home?"

"Had a letter this morning. Father and mother both down with the grippe, and neither nurse nor doctor to be had. She is thankful for what she learned here about it."

"I have to go very near Smithville this afternoon," remarked the doctor, quietly. "Think I will call and see how she is. She is an excellent nurse, but not yet strong."

"Doctor Peters is going up to see Gertrude this afternoon," said Mr. Upton when he went home.

"Going to see Gertrude!" exclaimed his wife. "I should as soon think of the Czar of Russia going to see Gertrude. What for?"

Mrs. Rich smiled placidly.

"I expected it," she said.

"What do you mean, mother?"

"Oh, nothing. Only I bought some things were queer, and the day he brought her so much fruit I asked him if he was married, he replied: 'No. If I were, you would be justified in thinking me too attentive to your niece!'"

## TRAMP OR GENTLEMAN?

He was a tramp, undoubtedly. The solitary marshal whose business it was to represent the majesty of the law in the little village of Blue Rock, spotted the stranger as soon as he entered the place.

The visitor was shabbily dressed. His coat was ragged and his trousers were patched. His hat was without a brim and his shoes let his feet touch the ground.

"I'll shadow him, anyway," said the marshal to himself.

The tramp slouched along down the shady side of the street until he reached the depot. Here he paused and took a seat on the platform.

"Hello, there! You must move on," said the officer.

The man thus rudely spoken to turned a weary face to the marshal. It was not a very clean face, and it bore traces of care. But it was not a bad face, nor a very old face. On the contrary, it was rather frank and youthful.

All this the marshal took in, but he had his orders and he had to carry them out. Blue Rock had passed an ordinance subjecting all tramps to thirty days' imprisonment at hard labor.

"What are you doing here?" asked the officer roughly.

"I am looking for work."

"Who are you?"

"I am a gentleman."

"A gentleman! You look like one. What is your name and where are you from?"

The wayfarer put his hand to his head and a puzzled look came over his face.

"I would give anything to be able to answer your questions, but

"We may have been too hard on him," responded the mayor. "I sometimes think he is wrong in the head."

"Well, it is too late to talk about it," said the other. And the conversation ended.

The tramp did not turn up again that day nor the next. The worthy marshal began to be worried, and the mayor was a little uneasy.

Blue Rock was such a small place that a sensation was always welcome, and the unknown prisoner had been the talk of the town for sixty days.

"He's hidin' in the woods, and will slip in some night and burn the town," said one.

This idea found great favor, and that night the villagers found it difficult to sleep.

On the following day there was a railway excursion to a point of interest forty miles away, and everybody of any consequence in the town went along. The mayor and council, the superintendent of the depot and even the marshal joined the party.

The return trip was made after dark, and the train sped along at a fearful rate of speed. The excursionists were all in a jolly humor, and were at the height of their festivities, when the frightful shrieking of the locomotive whistle startled everybody. The train came to a full stop, and among those who rushed out were the mayor and marshal of Blue Rock.

At the head of the train they found the engineer and conductor talking with a man who held one hand to his side, from which the blood was streaming.

"Great God! It is our tramp!" exclaimed the marshal.

"You are right," said the mayor. "My poor fellow, what is the matter?"

The tramp fell in a fainting fit before he could answer this question.

"You see," said the engineer, "this man was tramping through the woods, when he came to the track and found two train wreckers tampering with the rails. Well, this tramp, or whatever he is, jumped on the scoundrels like a tiger. He disabled one of them, but the other stabbed him in the side and ran away. So he built a fire on the track, and as soon as I saw it I stopped the train."

Just then several passengers came up with the wounded wrecker, who had been seriously injured by the tramp.

The villain evidently thought that he was mortally wounded, for he made a full confession.

"I think," said the Blue Rock mayor, "that we owe a debt of gratitude to our preserver. Many men in this fix would not have turned over a hand to save us."

The poor tramp opened his eyes and smiled faintly.

"Did you know we were on the train?" asked the marshal.

"Oh, yes; I saw you when you went up the road this morning, and I hung about here because I saw those two chaps acting suspiciously around the track."

"Come, now, who are you, and where is your home?" asked the marshal.

"I am a gentleman. I have forgotten my name and all about things that happened years ago. I can tell you nothing more."

"By George!" said the mayor, "I believe he tells the truth."

"We must take him to Blue Rock and care for him," said one of the party. "He shall have the freedom of the town and the best there is in it."

"Thank you," said the tramp, with a smile, "I am satisfied now."

A spasm of pain contracted his features.

A gasp, a fluttering of the breath, and the unknown was dead.

Tramp or gentleman, who was he and what lay back of his misfortunes?

These were the questions that the Blue Rock excursionists asked each other on their way home.

#### A NATIONAL FLOWER.

There have been many articles in the papers during the past few months, advocating the adoption of the clover blossom as the national flower, but the most unique is the following, by Colonel Robert G. Ingersoll:

"A wonderful thing is clover. It means honey and cream; that is to say, industry and contentment; that is to say, the happy bees in perfumed fields, and at the cottage gate old boss, the bountiful, chewing satisfaction's cud, in that blessed twilight pause that like a benediction falls between all toil and sleep. This clover makes me dream of happy hours, of childhood's rosy cheeks, of dimpled babes, of wholesome, loving wives, of springs and brooks and violets, and all there is of painless joy and peaceful human life. A wonderful word is clover. Drop the 'c' and you have the happiest of mankind. Take away the 'c' and 'r' and you have the only thing that makes a heaven of this dull and barren earth. Cut off the 'r' alone and there remains a warm, deceitful bud that sweetens breath and keeps the peace in countless homes whose masters frequent clubs."

A GREAT many of our would-be reformers are like the man who stays up all night trying to get people to go to bed.—*Terre Haute Express.*

#### NEBRASKA, ITS ACHIEVEMENTS AND CAPABILITIES.

As a "bright star in the galaxy of states," there is probably no one state that has so quickly developed from what was supposed to be "an irreclaimable wilderness" into a garden of ever-increasing abundance and marvelous agricultural productivity, as the state of Nebraska. With an area exceeding three of the most productive kingdoms of Europe combined—England, Belgium and the Netherlands—it has already attained a magnificent position in the sisterhood of states.

It is not many years since the larger portion of Nebraska was considered almost worthless and quite unattractive for settlement, but under the impetus of a magnificent system of railroads—the trans-Missouri system of the "Great Burlington Route"—traversing the state from end to end, comprising a network of branches extending into fifty-six counties and aggregating nearly 2,500 miles of line, or nearly one half the entire railroad mileage of the state, Nebraska, during the past decade especially, has advanced rapidly in every essential element that contributes to individual prosperity and statehood greatness. As evidence that this great network of "iron arteries" has been a most powerful factor in the development of the state, enter it via either of its principal gateways—Plattsmouth, Nebraska City or Rulo—and everywhere will be seen, amid smiling cornfields and fruitful orchards, comfortable homes of a prosperous and contented population.

During the past ten years Nebraska has been the Mecca of the new home-seeker. Probably not less than 500,000 people, or about 1,000 people a week, have been attracted to her fertile fields to engage in the development of her magnificent resources. As to the achievements of Nebraska, we have but to glance at the census report of 1880, when Nebraska stood eighth in the production of corn; of wheat, twelfth; and in number of cattle, fifteenth. In 1887 it had advanced to the fourth place among the corn states, passed three of its former rivals in the production of wheat, and stepped to the tenth place in the number and value of its live-stock. Its population has more than doubled since 1880; the census of 1890 will, without doubt, give her over 1,000,000, while showing an increase in the number of farms from 63,387 to nearly 150,000; of live-stock, from 2,424,590 to nearly 5,000,000, and their value increased from \$33,440,000 to nearly \$100,000,000.

In manufactories, which numbered in 1880, 1,403, with products valued at \$12,628,000, there will be shown an increase of over three-fold in number and more than four-fold in value of products.

Its crops of the three principal cereals, which aggregated in 1880, 85,850,000 bushels, have since reached nearly 200,000,000 bushels, with an increase of real and personal property from \$362,350,000 to at least \$750,000,000.

The significance of the foregoing statements is enormously heightened by certain considerations that have never until recently been brought to public attention, and that cannot be too strongly or too frequently impressed upon the public mind. The first is that not more than one acre in four of the arable land of the state has yet been brought under cultivation, nor have its various sources of wealth been much more than thoroughly proven. Second, that for the last ten years the corn crops of Nebraska have averaged a larger yield per acre than those of any other of the great corn-producing states. Third, that they have averaged a larger number of bushels per capita, either of those employed in raising them or of the entire population of the state, than those of any other state or territory in the Union. Fourth, and most significant of all, that for the last four years, and probably for a still longer period, if the figures were only obtainable, a larger percentage of the corn product of Nebraska has been of a merchantable standard than of that of any other great agricultural state.

Nebraska not only lies within the great corn belt of the country, a fact which a large proportion of intending settlers very properly regard as of great importance, but statistics inform us it is itself the very finest portion of that belt. With three fourths of its cultivable area as yet unbroken, and with a greater diversity of farming operations than is to be found in any other of the newer states or territories, Nebraska produced in 1889 a corn crop estimated by the United States Department of Agriculture at 149,543,000 bushels, with every prospect of an immensely increased crop for 1890.

With a climate dry and equable, and accordingly, salubrious and delightful; a soil richly endowed by mother Nature with an inexhaustible supply of chemical plant food, overlaid with a rich loam of almost unvarying fertility, possessing a persistence and capacity for the retention of moisture that enable it to withstand the extremes of dry and wet, Nebraska, perhaps more than any other state, is admirably adapted to diversified farming.

For stock raising Nebraska possesses peculiarly advantageous conditions. The singularly dry and equable climate reduces almost to the vanishing point the various diseases to which stock of all descriptions are

ordinarily subject, while the maintenance of stock in winter is a matter of comparatively trifling cost, owing to the abundance and nutritious character of the native grasses and the cheapness with which every other description of feed that can be used with advantage (including tame grasses of every variety, grain and roots) can be raised.

Farm animals of every description show an enormous increase in number and value since the state census in 1885, milch cows among the number having increased from 236,209 to nearly 450,000 and swine from 1,679,200 to nearly 2,500,000. Practical farmers calculate that by raising hogs they virtually get almost double the price for their corn that it would yield them sold in the grain. With Omaha, the fourth largest stock market and third largest packing center in the country, within easy access from every part of the state over the trans-Missouri system of the "Great Burlington Route," the farmer finds quick and profitable market for all surplus stock.

Nebraska is also forging ahead in the production of butter and cheese. At the American Dairy Show, held at Chicago in November, 1889, Nebraska carried off four first and five second premiums, together with the diploma for the largest and best display of butter in the entire show. There is not the slightest doubt that Nebraska will soon be one of the greatest dairy states in the country, all the conditions necessary to that end being found within its borders.

Fruit growing is also assuming gigantic proportions. Incomplete returns now show forty-four counties with apple trees in bearing and twenty counties with peach trees in bearing. As far west as Adams county, apples, peaches, cherries and almost every variety of small fruit are easily and profitably cultivated. The Nebraska exhibit at the St. Louis Fair of 1889 included a fine display of Nebraska apples, chiefly from Fillmore, Jefferson and Kearney counties. As an illustration of the ignorance and prejudice that so largely prevail, it may be stated that of the half million people who saw that exhibit, few could be persuaded that such magnificent fruit had really been grown in Nebraska, but the "land of broad rivers" "got there" and took the first premium.

One of the most promising branches of agricultural industry in Nebraska at the present time is the cultivation of sugar beets. It has been ascertained that while European sugar beets contain only from eight to twelve per cent of sugar, those raised in Nebraska average from sixteen to eighteen per cent. This discovery has led to arrangements being made for the erection of immense beet sugar refineries at Grand Island and Wellfleet, thus affording the farmer a home market and an immediate sale for what is likely to prove one of the best paying crops in the country.

Nebraska, viewed in the light of what it has already achieved as well as the broad perspective of its yet undeveloped capabilities, cannot fail to rapidly advance to the front line as one of the greatest agricultural states in the Union. In no other state can there be seen at this very moment so magnificent a picture of agricultural prosperity. Waving corn fields, golden wheat fields in process of being harvested, large herds of fine cattle, handsome groves of trees and snug homesteads following each other in rapid succession. It is the state *par excellence* for meeting almost every requirement of the intending settler. If you have but little money, free government land in the central and southwestern counties is offered you for immediate settlement, while in the regions traversed by the recently constructed branches of the "Burlington Route," thousands of acres are obtainable on very reasonable terms.

In Hamilton, Carter, Thomas, Hooker, Grant, Sheridan, Box Butte, Sioux, McCook, Hitchcock, Dundee, Hayes and Chase counties, in fact, almost everywhere, are to be found millions of acres of the finest arable land in the world, and the home seeker, as well as the man who seeks a competence from agricultural pursuits, should take Horace Greeley's advice and "go west and grow up" amid the enchanting environments of the farmers' El Dorado—Nebraska.

A very interesting pamphlet of 32 pages, with map of parts of Nebraska, Wyoming and South Dakota, recently issued by the Burlington Route, presents in detail the wonderful achievements and capabilities of this great state, together with useful information concerning United States land districts, how to enter the public lands, the homestead law, the pre-emption law, timber culture law, fees, railroad lands, relinquishments, school lands, improved farms, opportunities for non-farmers, etc., etc., a copy of which should be in the hands of every reader of this paper.

We would not advise you to rest satisfied with the mere reading of this interesting book—"Nebraska, Its Achievements and Capabilities"—on the contrary, would urge you to witness with your own eyes the magnificent proportions of Nebraska's agricultural development and therefore remind you that the Burlington Route, C. B. & Q. R. R., will sell on Tuesdays, September 9th and 23rd, and October 14th, Harvest Excursion Tickets at *Half Rates* to points in the Farming Regions of the West, South-west and North-west. For tickets and further information concerning these excursions, call on your nearest ticket agent, or address, P. S. EUSTIS, Gen'l Passenger and Ticket Agent, C. B. & Q. R. R., Chicago, Ill.



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## Our Household.

## A PIN.

Oh, I know a certain woman who is reckoned with the good, But she fills me with more terror than a raging lion would. The little chills run up and down my spine whene'er we meet, Though she seems a gentle creature and she's very trim and neat.

And she has a thousand virtues and not one acknowledged sin, But she is the sort of person you could liken to a piu. And she pricks you, and she sticks you, in a way that can't be said— When you seek for what has hurt you, why, you cannot find the head.

But she fills you with discomfort and exasperating pain— If anybody asks you why, you really can't explain. A pin is such a tiny thing—of that there is no doubt— Yet, when it's sticking in your flesh, you're wretched till it's out!

She is wonderfully observing—when she meets a pretty girl She is always sure to tell her if her "bang" is out of curl. And she is so sympathetic; to her friend, who's much admired, She is often heard remarking, "Dear, you look so worn and tired!"

And she is a careful critic, for on yesterday she eyed The new dress I was airing with a woman's natural pride, And she said, "Oh, how becoming," and then softly added, "it Is really a misfortune that the basque is such a fit."

Then she said, "If you had heard me yestereve, I'm sure, my friend, You would say I am a champion who knows how to defend." And she left me with the feeling—most unpleasant, I aver, That the whole world would despise me if it had not been for her.

Whenever I encounter her, in such a nameless way, She gives me the impression I am at my worst that day. And the hat that was imported (and that cost me half a sonnet) With just one glance from her round eyes he comes a Bowery houset.

She is always bright and smiling, sharp and shining for a thrust— Use does not seem to blunt her point, nor does she gather rust. Oh! I wish some hapless specimen of mankind would begin To tidy up the world for me by picking up this pin.

—Ella Wheeler Wilcox, in the *Century*.

## HOME TOPICS.



AKING CARE OF THE FRUIT.—With all the other work of the summer comes that of taking care of the fruit, if one is so fortunate as to have more than enough for present use. If the housewife lives in the city and must buy all her fruit, it will not pay her to buy for canning. She might better buy it canned ready for use. With pickles, preserves, jellies and marmalades it is different. These can rarely

be procured that will compare favorably with those made at home. With pickles there is always a lurking suspicion of sulphuric acid, and with jellies and marmalades there is always a feeling of uncertainty as to the ingredients.

PEACH MARMALADE.—The peaches should be ripe and soft, but small ones will be as good as larger ones. Peel the fruit and cut it into small pieces. Weigh it before putting it over the fire with a pint of water. Boil it steadily until the peaches are soft and as much of the water evaporated as can be without danger of scorching. Remove it from the fire and sift it through a colander, then add three quarters of a pound of sugar to each pound of the peaches. Put it over the fire again and let it boil, stirring it all the time to prevent scorching. When you think it is nearly thick enough, take out a little and cool it to decide. When the

marmalade is done, fill pint cans and seal them. This is excellent when used by itself or in puddings.

QUINCE MARMALADE.—This is made the same as peach, but if quinces are not plenty a very good marmalade can be made by using an equal quantity of quinces and apples, and if the quince peelings and cores are boiled with an equal quantity of apples and strained through a jelly-bag, a delicately flavored quince jelly may be made.

GRAPE JELLY AND MARMALADE.—It is always best to make these at one time. Pick over and stem well-flavored grapes, with some not quite ripe ones among them. Press them until you have enough juice so they will need no water to cook them. Let them boil until the skins are broken, then pour into a jelly-bag, hang it up and let as much juice drain out as will without squeezing the bag any. Of this juice make jelly by adding a pint of sugar to each pint of the juice and boiling it until it will jelly when cold. I do not think any exact rule can be given as to the time jelly should boil, as sometimes the juice is thicker than at others and some days it will evaporate faster.

Empty the grapes out of the bag into a colander, sift them and put the pulp back in a preserving-kettle, adding two pints of sugar to three of the grapes. Let it boil, stirring it constantly until it cools thick enough, and then seal in glass jars.

SPICED GRAPES.—Take ten pounds of any good, ripe grapes, eight pounds of sugar, four tablespoonfuls each of cloves and cinnamon, and one quart of vinegar. Boil the grapes as for marmalade, rub them through a colander, and then add the sugar, vinegar and spices, and boil all together slowly until thick enough. Spiced gooseberries, cherries and currants made in the same way are delicious.

A PRETTY WEDDING.—Not long ago I attended the marriage of a young friend, where all of the arrangements were so simple and yet so pretty, that I will describe them. Except a few palms, the decorations were nearly all wild flowers—oxeye daisies, mountain laurel and ferns, with trailing sprays of myrtle. The bay window at the end of the long, double parlor was made a perfect bower of beauty, and here the clergyman stood. Only relatives and intimate friends were present. At the appointed time the Norwegian bridal procession march was played. At the first notes of this, two young ladies entered from the library carrying white ribbons looped over one arm, with which they made a passageway through the parlor to the bay window, and stood, one on either side, holding the end of the ribbon during the ceremony. The bride and groom entered together, and unattended, walked through the ribbon-outlined way, and after the solemn words were spoken which made them husband and wife, they walked back to the library, followed by the two young ladies, who gracefully looped the ribbons over their arms as they walked. In the library the happy pair received the congratulations of their friends, and the two ribbon bearers cut it into suitable lengths and gave to each guest as a souvenir. Afterwards, refreshments were served, and at ten o'clock the bridal pair left for their new home amid a shower of rice and good wishes.

MAIDA McL.

## CLYDESDALE LACE.

ABBREVIATIONS: O, over; n, narrow; k, knit; t o t or o t, thrcad over twice; s t tog, seam two together.

Cast on 39 stitches, and knit across plain. First row—Slip 1, k 2, t o t, s t tog, k 8, n, k 4, t o t, s t tog, k 12, o, n, o, n, k 2.

Second row—K 9, o, n, o, n, o, n, k 4, t o t, s t tog, k 8, t o, n, k 4, t o t, s t tog, k 3.

Third row—Slip 1, k 2, t o t, s t tog, k 9, t o, n, k 3, t o t, s t tog, k 13, t o, n, o, n, o, k 2.

Fourth row—K 11, o, n, o, n, o, n, k 3, o t, s t tog, k 9, o, n, k 3, o t, s t tog, k 3.

Fifth row—Slip 1, k 2, o t, s t tog, k 10, o, n, k 2, o t, s t tog, k 14, o, n, o, u, o, k 2.

Sixth row—K 13, o, n, o, n, o, n, k 2, o t, s t tog, k 10, o, n, k 2, o t, s t tog, k 3.

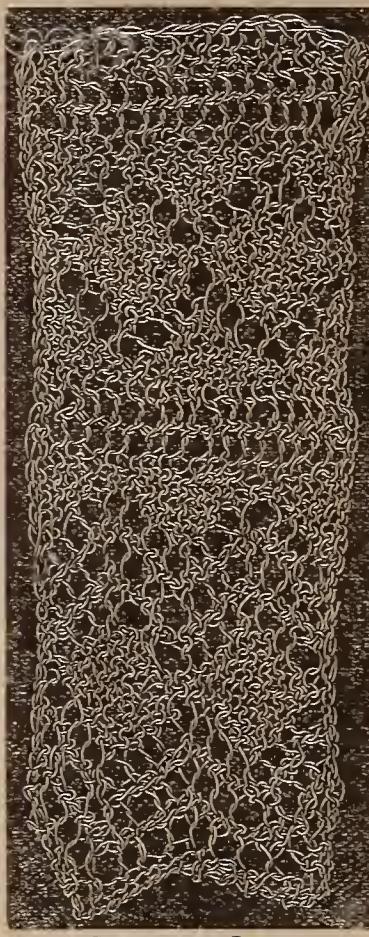
Seventh row—Slip 1, k 2, t o t, s t tog, k 11, o, n, k 1, o t, s t tog, k 15, o, n, o, n, o, k 2.

Eighth row—K 15, o, n, o, n, o, n, k 1, o t, s t tog, k 11, o, n, k 1, o t, s t tog, k 3.

Ninth row—Slip 1, k 2, o t, s t tog, k 14, o t, s t tog, k 22.

Tenth row—N, k 1, o, n, o, n, o, n, k 13, o t, s t tog, k 3, o, n, k 9, o, s t tog, k 3.

Eleventh row—Slip 1, k 2, o t, s t tog,



CLYDESDALE LACE.

k 3, o, n, k 9, o t, s t tog, k 3, o, n, o, n, o, n, k 12.

Twelfth row—N, k 1, o, n, o, n, o, n, k 12, o t, s t tog, k 4, o, n, k 8, o t, s t tog, k 3.

Thirteenth row—Slip 1, k 2, o t, s t tog, k 4, o, n, k 8, o t, s t tog, k 4, o, n, o, n, o, n, k 10.

Fourteenth row—N, k 1, o, n, o, n, o, n, k 11, o t, s t tog, k 5, o, n, k 7, o t, s t tog, k 3.

Fifteenth row—Slip 1, k 2, o t, s t tog, k 5, o, n, k 7, o t, s t tog, k 5, o, n, o, n, o, n, k 8.

Sixteenth row—N, k 1, o, n, o, n, o, n, k 10, o t, s t tog, k 6, o, n, k 6, o t, s t tog, k 3. Repeat from first row.

All lovers of knit lace will find this pattern very easy to knit, and it makes very pretty lace for white aprons.

AUNT MARY.

## CROCHET SHELL LACE.

TERMS USED: Ch, chain; st, stitch; d c, double crochet, sh, shell.

Make a chain of 22 stitches.

First row—1 d c in 6th st from needle, 2 ch, 1 d c in 8th st, 2 ch, 1 d c in 10th st of ch, 3 ch, 1 d c in same st, slip 3 st, 1 d c in next st, 3 ch, 1 d c in same place, ch 8 and fasten in end of ch; 3 ch and turn.

Second row—Make 12 d c in last ch, make 3 d c between the d c in last row, 2 ch and 3 more d c in same place;

this makes a sh; 3 d c in next loop, 2 ch and 3 more d c in same, 2 ch, 1 d c on d c, 2 ch, 1 d c on 3d st of last row; ch 5 and turn.

Third row—1 d c on d c, 2 ch, 1 d c on d c, 3 ch, 1 d c in same, 1 d c between all of the 12 d c in last row, with one st between every one; ch 3 and turn.

Fourth row—1 d c between every one, and two st between till you get to the sh; 3 d c in sh, 2 ch, 3 d c in same, 3 d c in next sh, 2 ch, 3 d c in same, 2 ch, d c on d c, 2 ch, 1 d c on d c, 2 ch, 1 d c in 3d st of ch in last row, 5 ch; turn. This is one scallop. Commence at first row again.

P. C. L.

DON'T RUN THE RISK of your Cold getting well of itself—you may thereby drift into a condition favorable to the development of some latent tendency, which may give you years of trouble. Better cure your Cold at once with the help of Dr. D. Jayne's Expectorant, a good healing medicin for all Coughs, Sore Lungs and Throats.

## OUR PICKLE COLUMN.

CUCUMBER PICKLES.—One hundred green cucumbers, about two inches long, will fill four glass quart jars. Soak twenty-four hours in rather strong brine. Then pour off the brine, and rinse in clear water. To this number of cucumbers, use

3 quarts of pure cider vinegar, 1 cup of sugar, 1 ounce of whole cloves, 1 ounce of stick cinnamon, 1 ounce of small, black peppers, A little horseradish, sliced, and A few small, red peppers.

Scald the cucumbers in the vinegar. As soon as the vinegar is scalding hot, dip them out, fill the cans and then pour the vinegar over them till the can is full. Seal hot.

## CHOPPED PICKLES.—

1 gallon of cabbage, 1 gallon of green tomatoes, 1 quart of onions,

2 or 3 green pepper pods, Chopped fine. Sprinkle salt over the tomatoes and let them stand awhile; then drain off the water and put in with the other ingredients, and, with this, add 4 tablespoonfuls of ground mustard, 2 tablespoonfuls of ginger, powdered, 1 tablespoonful of cloves, powdered, 1 tablespoonful of mace, powdered, 1 tablespoonful of cinnamon, powdered, 3 pounds of sugar, 3 ounces of turmeric powder, 1 ounce of celery seed.

Mix well and cover with good vinegar, and boil slowly till done.

GREEN TOMATO PICKLE.—Chop a peck of green tomatoes, and stir in half a teacup of salt. Drain over night. Add

3 green peppers, chopped, 1 teacup grated horseradish, 2 quarts vinegar, 1 teacup of sugar.

Let it boil, gently stirring occasionally, till the tomato is tender, then add a great spoonful each of cinnamon and cloves.

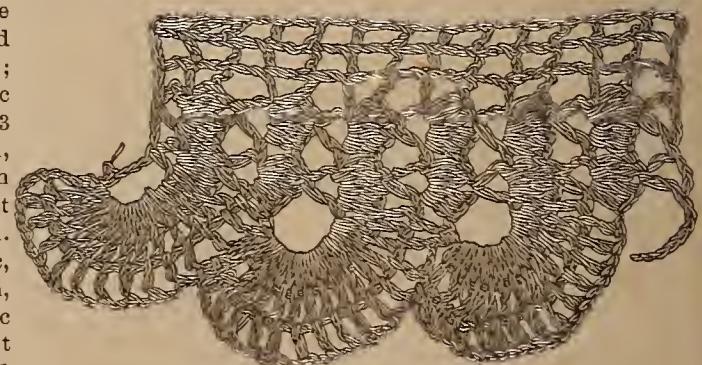
BOTTLED PICKLES.—Pour boiling water over them, and let stand four hours; to every gallon of vinegar, take

1 teacupful of sugar, 1 teacupful of salt, 1 teaspoonful of pulverized alum, 1 ounce of cinnamon bark,  $\frac{1}{4}$  of an ounce of whole cloves.

Boil spice and vinegar, and pour over the pickles; seal while hot.

## HOW I MADE SOAP.

I like old-fashioned, home-made, soft soap best for all ordinary rough work. I did not know how to make it, so I have always had my grease made up away from home. But it was not always satisfactory, and after due deliberation, I determined to make soap myself. A scholarly lady of many years' experience as a housekeeper told me that no one without a good, practical knowledge of chemistry could suc-



CROCHET SHELL LACE.

ceed in making soap. Unfortunately, I was like Miss Pallas Andora Von Blurkey—my knowledge of chemistry was murky, chemical experiments being twenty years behind me with my school days. But I had made up my mind to make soap, and "when a woman will, she will, you may depend on it." Instead of chemical knowledge, I thought I would substitute perseverance, with what little common sense I could muster, and so I went to work.

The wood we burned was hickory, sugar, hellebore and oak, cut green and dried before using. I was careful to save ashes that were free from burnt walnut shells or stone coal ashes, as either will prevent

the formation of soap. When a sufficiency of ashes had been saved, I made a small platform with a bench and some boards, covered it entirely with a piece of zinc, having the back part a little higher than the front, so that the lye could be caught conveniently. I placed a barrel upon this platform, from which a part of the bottom had been removed, put in a little clean straw, and filled it about one fifth full of ashes. I then sprinkled a gallon of slack lime in the barrel, after which I filled it full of ashes, pressing the contents occasionally with a stick of wood. I poured rain water on this, and in twenty-four hours the lye began to run.

I have a large, iron kettle, and an iron ring with three long feet; the kettle fits into this ring, and I am not troubled with forked sticks and a pole upon which to swing my kettle. A stationary kettle is much more convenient than a swinging one. I put six gallons of very strong lye into the kettle, together with eighteen pounds of clear lard and tallow. After boiling it a short time it began to look soapy, but continued boiling did not improve it. By testing it I found it to be exceedingly strong, so I poured three gallons of rain water into the kettle, and the result was eleven gallons of very excellent soap. I think I might have made as much more from that barrel of ashes.

One of my neighbors called across the fence and told me that, as I had gone into the soap business, she wanted me to try her mode of making hard soap. I did so, and made twenty pounds, as white as the Ivory, at a cost of forty cents. The following is the recipe: 5 pounds of soda ash, 2½ pounds of lime (unslacked), 12 gallons rain water, 10 pounds lard, 2 ounces borax. When the water boils, add the soda ash, lime and borax. After it is thoroughly dissolved, pour the mixture into a tub, and when it is cool, pour off carefully, avoiding the sediment as much as possible; then put this mixture and the lard into the kettle and boil fast for two hours. When cold, cut it out and dry.

Cousin Nabbie.

#### COOKING TERMS.

Many cook books, as well as cooking articles in magazines, contain cooking terms which are not understood by the ordinary cook, thus rendering the recipes useless. For the benefit of such we give some of the most common of these terms, with their meaning:

Au bleu—Fish dressed so as to have a blue tint.

Aspic—A meat jelly for covering game pies, serving with boned turkey, etc.

Au jus—in the natural juice or gravy.

Bechamel—A sauce made from meats, onions and sweet herbs.

Bain-Marie—A sauce-pan for boiling water, into which a smaller pan fits.

Braise—A manner of stewing meat.

Blanquette—A preparation of white meal.

Bouilli—Beef stewed slowly and served with sauce.

Bouillon—French soup or broth.

Bisque—A shell-fish soup.

Civet—Wild fowl or game hash.

Compote—Sometimes applied to fruit stewed in sirup, and sometimes to pigeons and small game.

Consomme—A strong gravy used for enriching other gravies and soups.

Caramel—Sugar boiled until the moisture is evaporated, and then used for ornamental dishes.

Crouton—A snippet of fried bread.

Entree—Side dish for the first course.

Farce—Force meat.

Gateau—A cake.

Jardiniere—A mode of stewing vegetables in their own sauce.

Maire—Dishes made without meat.

Meringue—Pastry made of sugar and white of egg beaten to a snow.

Nougat—A mixture of almonds and sugar.

Pate—A small pie of oysters or meat.

Pot-au feu—The common bouillon of the French peasants.

Quenelles—Force-meat balls.

Raux—Thickening for sauces.

Saute—to mix or unite all the parts of a ragout by shaking while frying.

Salmis—Game hashed when half roasted.

Piece de Resistance—The principal joint of the dinner.

Serviette a la—Served on a napkin.  
Sorbet—A sherbet.  
Souffle—A very light pudding.  
Veloute—White sauce.  
Vol au vent—Light puff tarts filled with meat.

ELIZA R. PARKER.

#### A CHEAP PORTFOLIO.

Agents for the painting, "Christ Before Pilate," and your papers, have doubtless devised many plans for carrying the picture and papers. The portfolio described below will be found the very thing for this purpose.

Get a carpenter to make a frame, or, rather, two frames, whose inside dimen-

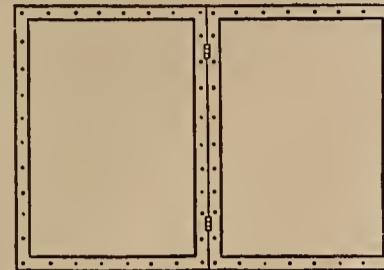


FIG. 1.

sions shall be one fourth inch larger on each side and end than the picture is. Hinge it together as represented in Fig. 1. Now get some thick pasteboard and cover it. Tack it on with carpet tacks. Now get some brown canton flannel and cover it all over the back, and fold it over and tack it on in the places represented by the dots in Fig. 1. If desired, it may now be covered inside with some pretty colored paper. The frame may be made of ¼-inch laths. You will find it necessary to tack it on the back at the hinge. This is necessary to keep the canton flannel in place. Get a small piece of silk cord and fasten it on the portfolio, as shown in Fig. 2. The portfolio is now ready for use.

As soon as you receive your sample picture and papers, lay them out in a convenient place with a few weights of some kind upon them. They will soon become flat, and you may then lay the picture in one side and the papers in the other side of the portfolio. You will find it necessary to place some kind of clasp on the portfolio to keep it shut. This portfolio will show the picture off to its best advantage.

WILLARD E. MOATS.

Maryland.

#### MANAGEMENT OF CHILDREN.

I have long been a silent, though interested, reader of FARM AND FIRESIDE, especially the "Household Department," and wish to express my appreciation of the many helpful hints and earnest, cheering words.

Anything concerning the management of children is of special interest to me, as I have a family of boys and girls of my own. I wish some wise sister would be good enough to tell me how to induce a big boy to have the same respect and consideration for his own sisters which he is so ready to accord to the sisters of other boys.

Also, would like a cure for giggles among girls, if a cure for that complaint has ever been discovered.

One suggestion I would like to make; that is, when one of the children spills something, or breaks a dish, let us try to treat the affair in the way we should if the accident had been caused by the carelessness of a visitor or stranger. Are we not too apt to fly into a rage and act as though we thought the mischief was done by design, and say and do things which, in a calmer moment, we would be heartily ashamed of? Should the stranger at our board be guilty of the same degree of awkwardness, we silence his attempts at apologizing with, "Oh, no difference at all; don't mention it," etc., and no matter how we may chafe inwardly, we change the subject and chat away as serenely as though we were a millionaire, and the smashing of the nicest dish in our possession of no more consequence to us than the snapping of a dry twig under the rabbit's tread.

Saying things which we will regret

afterwards, and making ourselves ridiculous, will not repair the damage, and, besides, do we not all know by experience that the offender feels miserable enough, without having abuse heaped upon him?

I am well aware that it is vexatious and discouraging, many times, where poverty abides, and articles broken not easily replaced, but we can, and certainly should, be as considerate of the feelings of our children as we are of the feelings of strangers. Mothers have many trials and irritations, and great need of self-control.

But, when one of our children has unintentionally given offense, if, instead of the sharp reprimand and the angry frown, we give the tender kiss and the gentle admonition to be more careful in future, do you not think they will remember it with loving gratitude, when we are dust?

CARMIA.

#### BURNS.

There is nothing more common or more painful than a burn. If it is slight, tie it up immediately in baking-powder laid upon a wet cloth. This seems to keep out the inflammation. If it does inflame and get sore, bathe with equal parts of raw linseed oil and lime-water; a bottle of this mixture kept in the house will be very useful. After the inflammation is out, heal with zinc salve, which any druggist will furnish you.

When nearly healed and still tender, keep covered with surgeon's plaster. This is much more pleasant than court-plaster. I found upon inquiry I could buy a yard, nicely put up in a case, for fifty cents. Wherever there are children this should be kept in the house, as it will save many a scar.

Never throw cold water on a burnt person, as this induces inflammation.

One of our little ones ran quickly to get the hatchet to chop a pin in two to use for something; instead, she chopped right through the nail of the left fore-finger to the bone. I just wound it up in surgeon's plaster, and never took it off till it healed, which it did without the least trouble, as she never took the least cold in it. Not long after I saw just such another finger, but it had been neglected and only a rag tied about it. It had festered, and bid fair to lose the top of the finger entirely. Just being prepared for the emergency made the difference in the two.

BETTINA HOLLIS.

#### MARRYING A HOUSEKEEPER.

Here is an idea for you. I was discussing a probable marriage with a friend. It was a marriage of which I greatly disapproved. Said I, "She will be no company for him, with his good education and cultivated taste. Does she know anything outside of her kitchen and crochet hook?"

He admitted that as long as she had lived in his family he had never seen her with a book or paper, except to learn a new pattern for knitting. As for writing a letter, he owned that he did not believe she could do as well as "little Two-shoes," pointing to a nine-year-old who sat scribbling at the table. "And yet," said I, "you think favorably of the marriage."

The man I was talking with is an old minister of the gospel—a college graduate, and for many years a teacher of youth. Being who he is, I quote his ideas. "Why," said he, "if a man doesn't marry a housekeeper, he will never have one. He can go to books, to his church, his lodge or society for his company, but what kind of a home will a man have whose wife is not a housekeeper? Excellence in mental endowments and in the domestic virtues are seldom combined in the same woman. When they are, blessed is the man whose home shelters her!" He wound up by saying in an emphatic manner: "Mrs. McClure, I am an old man; I have lived among all classes of people, from the best families in Boston to the pioneers of Indian Territory, and I have learned that there is no comfort to be taken with a wife who is not well versed in kitchen lore. It is far more necessary to the happiness of a family than all other accomplishments combined!" There, girls, what do you think of that? It is well enough to believe it for awhile, anyhow. It may give you new interest in "homely duties" and save you from wrecked happiness.

MRS. B. J. MCCLURE.

#### TO KEEP MEAT FOR SUMMER USE.

As I am a farmer's wife, I will give my way of putting away hams and smoked beef for summer use. First, rub all the cut surface with powdered borax; then take a large sack (those of burlap, that can be bought for ten cents, are just right), put some clean hay all around the inside. Then, if large ones, put a ham in each sack; if small ones, you can put two together. Be sure the hay keeps the meat from touching the sack in any place; then tie it tightly, and hang in a cool, dark, but dry place. I always hang mine in the smoke-house. If thus protected the meat will remain sweet and free from insects. It must be done before any flies are about.

MRS. J. I. M.

#### TO CLEAN ENGRAVINGS.

It often occurs during house-cleaning time or moving, fine engravings, in spite of the care of them, will become stained and dirty to such an extent as to seriously impair their beauty. Try this simple remedy of restoring them: Put the engraving on a smooth board, tack at each corner, cover it with a thin layer of common salt, finely pulverized; then squeeze lemon juice upon the salt until it is partly dissolved. After every part of the picture has been subjected to this treatment, elevate one end of the board, so that it will form an angle of about forty-five degrees. From a teakettle pour boiling water until the salt and lemon juice are all washed off. It will be clean and free from stain. It must be dried gradually on the board, not in the sun nor by a fire.

#### WILD GOOSEBERRIES.

These berries are very plentiful in many farmers' woods, but are thought worthless on account of their covering of prickles. These may be taken off with very little trouble, and the gooseberries are then as good to use as the tame ones, unless they be a trifle more sour. Take an old-fashioned meal-sieve and put in berries enough to cover the bottom; then with a gloved hand, or an old rag wrapped around the hand, roll the berries gently around over the sieve; give the hand a rotary motion, but do not press down hard enough to mash the berries. The prickles are caught in the meshes of the wire sieve and pulled or broken off as the berries are rolled about. They clean better soon after picking, and before they have time to wilt. One can clean them very rapidly after a little practice, and they make such nice pies and sauce. I canned three cans of gooseberries last summer, and they kept very nicely.

#### MENTAL KITCHEN SCALES.

Ten common-sized eggs weigh one pound.

Soft butter the size of an egg weighs one ounce.

One pint of coffee A sugar weighs twelve ounces.

One quart of sifted flour (well heaped) one pound.

One pint of best brown sugar weighs thirteen ounces.

Two teacups (well heaped) of coffee A sugar weigh one pound.

Two teacups (level) of granulated sugar weigh one pound.

Two teacups of soft butter (well packed) weigh one pound.

One and one third pints of powdered sugar weigh one pound.

Two tablespoons of powdered sugar or flour weigh one ounce.

One tablespoon (well rounded) of soft butter weighs one ounce.

One pint (heaped) of granulated sugar weighs fourteen ounces.

One tablespoonful (well heaped) granulated, coffee A or best brown sugar, equals one ounce.

Four teaspoons are equal to one tablespoon. Two and one half teacups (level) of the best brown sugar weigh one pound.

Miss Parloa says one generous pint of liquid, or one pint of finely-chopped meat, packed solidly, weighs one pound, which it would be very convenient to remember.

Teaspoons vary in size, and the new ones hold about twice as much as an old-fashioned spoon of thirty years ago. A medium-sized teaspoon contains about a drachm.

## Our Sunday Afternoon.

## IS LIFE WORTH LIVING?

As life worth living? Yes, so long  
As there is wrong to right,  
Wail of the weak against the strong,  
Or tyranny to fight;  
Long as there lingers gloom to chase,  
Or streaming tear to dry,  
One kindred woe, one sorrowing face  
That smiles as we draw nigh;  
Long as a tale of anguish swells  
The heart, and lids grow wet,  
And at the sound of Christmas bells  
We pardon and forget;  
So long as Faith with Freedom reigns,  
And loyal Hope survives,  
And gracious Charity remains  
To leaven lowly lives;  
While there is one untroubled tract  
For Intellect or Will,  
And men are free to think and act,  
Life is worth living still.

—English Illustrated Magazine.

## RICH WITHOUT MONEY.

ANY a man is rich without money. Thousands of men with nothing in their pockets, and thousands without even a pocket, are rich. A man born with a good, sound constitution, a good stomach, a good heart, and good limbs and a pretty good headpiece, is rich. Good bones are better than gold; tough muscles than silver; and nerves that flash fire and carry energy to every function, are better than houses and lands. It is better than a landed estate to have the right kind of a father and mother. Good breeds and bad breeds exist among men as really as among herds and horses. Education may do much to check evil tendencies or to develop good ones; but it is a great thing to inherit the right proportion of faculties to start with. The man is rich who has a good disposition, who is naturally kind, patient, cheerful, hopeful, and who has a flavor of wit and fun in his composition.

The hardest thing to get on with in this life is a man's own self. A cross, selfish fellow, a desponding and complaining fellow, a timid and care-burdened man—these are all born deformed on the inside. They do not limp, but their thoughts sometimes do.—*Clay Manufacturers' Engineer.*

## "PAY FOR THE PITCHERS."

A Christian woman once asked for money for the cause of Christ, and the objection was raised, "Why, I thought you preached a free gospel; and you talk about the water of life being free, without money and without price." "Yes," said she, "the water of life is free, but we need money to pay for the pitchers to carry it in."

Yes, ours is a "free salvation," but we must pay for the Bible and tracts which tell about it. We must pay passage on the ships and railroads which carry our missionaries to the heathen; we must supply them with food and clothing, and means to bring up their children, while they give their time to the work of telling "the story of the cross" to the heathen, and translating books and Bibles, or learning the languages so that they may speak and write it. And the money for this purpose ought to come from every church of Christ, from every believer in the Savior, however rich or poor, in its due proportion.—*Episcopal Recorder.*

## AN INCIDENT.

Sometimes, in stations of life where we least expect to find it, a lesson in courtesy is given that leaves its impress for days. One morning recently, there entered one of the elevated cars at the city hall station two men, evidently a mason and his helper. One carried a roll of carpet in which was his trowel, level, line, etc., while the other carried a hoe and a long-handled spade; these he laid lengthwise under the seats, and the men sat down. The brakeman sat near the door, and at once said: "Please don't leave those there; some lady might catch her dress; put them on the platform." A disappointed look came into the faces of both men as the man carried his tools out and stood them up at the end of the car. "I'll look after them," said the brakeman pleasant-

ly. "Where are you going?" When the man answered, the brakeman replied, "All right. You go in and sit with the other man; I'll look out for these." The workman was so unused to such courtesy and consideration that he was confused, and looked at the brakeman in amazement.

At last he comprehended, and with profuse thanks went back to his seat. As the cars approached the stations the brakeman was careful to have the tools entirely out of the way; but the workman at each station nodded thanks. Somehow the sun had an added brightness that day, and the time when all men shall feel the kinship of brotherhood seemed closer at hand.—*Christian Union.*

## LOVE FOR MOTHER.

When gruff old Dr. Johnson was fifty years old, he wrote to his aged mother as if he were still her wayward but loving boy: "You have been the best mother, and I believe the best woman in the world. I thank you for all your indulgence to me, and beg forgiveness of all that I have done ill, and of all that I omitted to do well."

John Quincy Adams did not part with his mother until he was nearly, or quite, as old as this, yet his cry even then was: "Oh, God, could she have been spared yet a little longer! Without her the world seems to me like a solitude." When President Knot, of Union College, was more than ninety years old, and had been for half a century a college president, as strength and sense failed him in his dying hours, the memory of his mother's tenderness was fresh and potent, and he could be hushed to needed sleep by a gentle patting on the shoulder, and the singing to him of the old-time lullabies, as if his mother were still sitting by his bedside in loving mystery, as she had been well-nigh a century before. The true son never grows old to a true mother.—*Sunday-School Times.*

## CHRIST'S LESSONS FROM NATURE.

Would Christ teach the precision with which he looks after you, he says he counts the hairs of your head. Well, that is a long and tedious count if the head has the average endowment. It has been found that if the hairs of the head be black, there are about 120,000; or if they be flaxen, there are about 140,000. But God knows the exact number: "The hairs of your head are all numbered." Would Christ impress us with the divine watchfulness and care, he speaks of the sparrows that were a nuisance in those times. They were caught by the thousands in the net. They were thin and scrawny, and had comparatively no meat on their bones. They seemed almost valueless, whether living or dead. Now, argues Christ, if my Father takes care of them, will he not take care of you? Christ would have the Christian despondent over his slowness of religious development go to his corn field for a lesson. He watches first the green shoot pressing up through the clods, gradually strengthening into a stalk, and last of all, the husk swelling out with the pressure of the corn: "First the blade, then the ear, after that the full corn in the ear."

## ONE AT A TIME.

I compare the troubles which we have to undergo in the course of a year to a great bundle of faggots, far too large for us to lift. But God does not require us to carry the whole at once. He mercifully unties the bundle, and gives us first one stick which we are to carry to-day, and then another which we are to carry to-morrow, and so on. This we might easily manage if we would only take the burden appointed for us each day; but we choose to increase our troubles by carrying yesterday's stick over again to-day, and adding to-morrow's burden to our load before we are required to bear it.—*John Newton.*

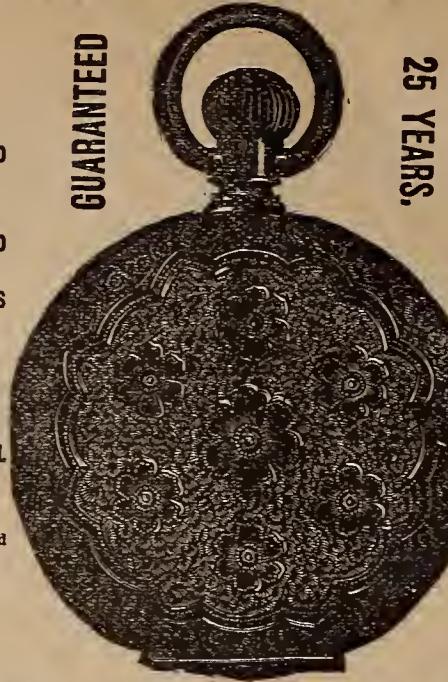
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## Our Farm.

## THE POULTRY YARD.

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## SHOULD WET FOOD BE GIVEN?

THE food of the hen was never intended to be wet or sloppy, while that of the duck should be just the reverse. The construction of the bills of the hen and the duck show plainly that the one should select seeds or other dry food, while the other is for food more bulky. The internal organs of the hen are adapted for the use of solid food. When the food enters the crop, and is there accumulated, it becomes softened, somewhat, and also slightly acidulated, the food then passing to the second receptacle, known as the ventriculus, and from thence to the gizzard. The ventriculus is supplied with a large number of tubular glands, the contact of the food with the walls of which promotes the pouring out of an acid secretion. The food thus saturated enters the gizzard, where it is reduced to pulp. When the food is very soft and watery, a less quantity of the secretion is poured out, and the digestion is not promoted. This is similar to the saturation of food by the salivary glands of mammals when food is masticated in the mouth, the more water drank the less quantity of the secretion poured out.

As the gizzard is intended to do the work of mastication, and as it is capable of reducing the hardest flint to the condition of an impalpable powder, it is plain that there is no necessity for softening or grinding the food of poultry, either for adults or chicks, as nature provides for both softening and grinding. The presence of too much water in the food is not relished by the hens, and when they are compelled to depart from the natural laws governing them, they become liable to disease.

Experiments made in feeding young chicks with dry food exclusively, show that they thrive and remain free from bowel difficulty, while similar results were not obtained when wet food was given, bowel disease attacking the chicks. In feeding dry food to poultry, however, one thing must be kept in view, and that is the fact that the fowls must have a *variety*. The reason that wet food is given by many is that a greater variety can be included in that form. There is, however, a difference between dry food, wet food and food that is only slightly moistened in a manner to cause the ground food to adhere sufficiently to permit the hen to eat it. Ground, dry food clogs the nostrils of hens, and for that reason no food should be fed in the dry, ground condition, but should be fed whole or very slightly dampened. Whole grains, or food in its entire state, is more wholesome for fowls, because they can prepare it in the gizzard better than it can be done for them.

## WHY GREEN FOOD IS RELISHED.

That which cannot be derived from one source may be taken from another. The mineral elements of many foods are but in small ratio compared with the whole, while water is sometimes the largest proportion of any substance. Nor can the mineral elements be secured to the best advantage from concentrated foods. The lime for the shells, the nitrogen, and the phosphates of the bones are taken from the foods that most largely abound in those substances. It takes over a thousand pounds of wheat to provide only one pound of lime, but in white clover hay we can secure nearly thirty-four pounds of lime in every thousand. When the hen eats green food, she does not only seek it for its succulence and bulk, but also for the elements contained that may not be found in grains or meat. The hen is herself composed of many elements which demand renewal, as waste is constantly occurring in the body, and eliminated; and she is also compelled to provide all the materials of the eggs, some hens performing such work very rapidly when in good laying condition. Green food is an essential portion of her diet, for the reason that she can obtain a larger proportion of mineral matter in that form. Many green

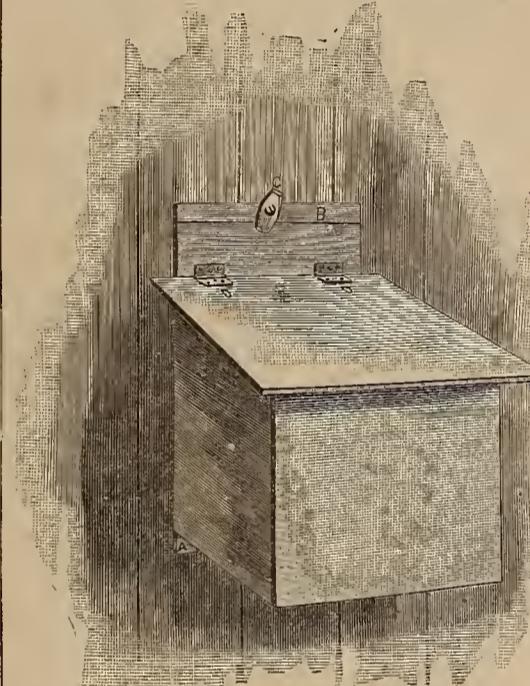
foods are rich in nitrogen, also. The grains abound largely in starch, and provide the heat and fat, which at times are unnecessary.

## SAVE YOUR CORN FOR WINTER.

Corn will not provide the hens with egg material. We are aware that many readers will smile when we tell them that corn should not be fed to hens in the summer; but facts are stubborn, for corn is mostly starch, and if the hen is to derive the materials from corn for the production of eggs, she will have to eat a quantity so large as to tax her fullest capacity, the result being that she is soon overfat, and will then not lay at all. Corn is excellent in winter, because it then keeps the hen warm, but during the summer season it is unnecessary. Do not waste your corn by feeding it now, but retain it for winter use.

## IMPROVED NEST-BOX.

Mr. James E. Riddle, Greersville, Ohio, sends a plan of a nest-box which is easily constructed and very convenient for cleaning out and collecting the eggs. In describing it he says: "There is no patent on this nest-box, so I will give it to your readers. It can be attached to any poultry-house by sawing a hole in the side of the building large enough to let the hens go through. The bottom of the nest-box is one foot square. Nail two pieces of lath to the side of your building, one at the bottom to support the nest, marked A in the illustration, and one at the top (B) just the thickness of the board



that the nest-box is made of, to attach a button (C) for holding the box in position. Nail a board extending upward from the bottom, five inches wide, next to the building. The board at the top where the hinges (D D) are attached is 6 inches wide, and extends 3 inches down each side of the box. The lid is 18 inches square, and the box is 12 inches high in front and 16 inches next to building. Having finished the box, all that is necessary is to turn the button at the top, and the box can be lifted from its support and cleaned, fresh nest material put in, and you can walk along the side of your building and gather the eggs from the outside, as these boxes are attached to the building from the outside."

## GIVING SULPHUR TO POULTRY.

We do not approve of the use of any kind of mineral medicine for fowls, especially when the birds are in good health. It is a habit with some to give sulphur, condiments, and other deleterious substances, to all the fowls. If such a practice should prevail with human beings, it would not belong before sickness would result, yet the fowls are dosed daily, the result being injury, which is then accredited to anything but the true cause. Sulphur will cause rheumatism in adults and leg weakness in chicks, and it will, if once it affects the system, show the effects every winter, especially in damp weather. Copperas is another mineral poison dosed out in the drinking water of fowls, and is harmful, it being a poison when taken in quantity, which is the case when the birds are compelled to drink the solution daily. Avoid all such things. Healthy birds require no stimulants other than sound food.

## GRIT IN THE SUMMER.

If the hens have a range, they are not always supplied with grit. A calculation made for one hundred hens will show that they pick up a large amount of grit in one day, and during the course of a year it may be measured by bushels. Now, because a range may have plenty of gravel, it is not to be inferred that the hens are always supplied with grit, for they demand only the grit that is sharp and cutting, voiding it from the body as soon as the edges are rounded off. The wear and tear of the rains, frosts and acids round all the gravel some, and they are usually smooth. By pounding some glass or old crockery, and placing it before the hens, they will be noticed to swallow it readily. This should prompt poultrymen to keep the range supplied with sharp material of some kind, no matter how gravelly a field may be.

## MOULTING HENS.

At least three months in each year of the life of a hen is devoted to throwing off the old feathers and growing new ones in their place. As a feather is composed largely of nitrogenous and mineral matter, the food should be of a varied character, so as to supply the hens with the needed materials. Grain will be in but little demand, but meat, grass and bone meal will be serviceable. One of the best substances to feed moulting hens is linseed meal. A gill of meal should be mixed with a quart of ground oats, a tablespoonful of salt and a teaspoonful of carbonate of iron, the whole well mixed, and moistened just sufficiently to adhere the materials. On dry days add a teaspoonful of sulphur. Feed this to twenty hens in connection with any other food they will eat.

## OUTDOOR DUST BATHS.

The best dust baths at this season is to spade up a space a yard square and a foot deep, sifting the dirt so that all gravel may be removed. The sun will dry it, and the hens will use it for ridding themselves of lice. Such a dust bath should be spaded after each rain, however, the labor of so doing being but a few minutes.

## NEST EGGS.

An egg will remain fresh but a short time during very warm days, and especially if left in the nest, to be occasionally warmed by the hens when they go on the nest to lay. When they become very stale, there is sometimes an accumulation of gas, the consequence being that the egg will burst in the nest, discharging its contents over the hens. As the lice delight in filth, this condition of things will be very favorable to them, and they will multiply so rapidly as to cause surprise. Never use eggs as nest eggs at any season of the year.

## KEEP ONE VARIETY.

If pure breeds are kept, a single variety only should be used by beginners, as they can then study and learn the characteristics of the breed. The knowledge gained will be valuable when other breeds are added. Exceptions may be made when the non-sitters are used, for it may be then necessary to have some other breed should it be desired to hatch chicks in the spring.

## EFFECTS OF OVERFEEDING.

If the hens have a range, and are not allowed anything except that which they pick up, they will suffer but little from bowel disease; but when fed so as to have them somewhat fat, they are liable to bowel disorders. The best remedies are plenty of sharp grit and to keep a lump of lime in the drinking water, with a box of charcoal where they can at all times have access to it.

## THE SITTING HENS.

Let them stay on clean nests for two weeks, and then break them up. Feed them as little as possible while they are on the nest, so as to cause them to lose flesh. A pound of lean meat to twenty-five hens per day is sufficient for sitters. To break them up, place them in a slat

coop—slat bottom and sides—off the ground, and they will soon abandon their attempt to incubate. Unless allowed to stay on the nest some before breaking them up, they will soon become broody again. A broody hen is usually fat.

## WHITEWASH SCALES.

It is claimed that when whitewash is applied to the poultry-house, and becomes dry, it begins to scale off, and provides the lice with harboring places. This is true, as may be seen in poultry-houses that have been whitewashed but seldom. But in preparing whitewash, a gill of crude carbolic acid should always be added to each bucket of whitewash, and the whitewash should be applied at least once a month in the summer season, as well as once or twice during the winter.

## SHIPPING TO MARKET.

Never ship poultry to market later than on Wednesday, as time is required on the journey, and the fowls may reach the market on Saturday, when they are sometimes sacrificed in order to avoid loss or shrinkage by retaining them over Sunday. Kill the fowls on Monday or Tuesday, and have all correspondence with your merchant attended to before you are ready to ship, in order to avoid mistakes.

## DO NOT CROWD THE HENS.

Do not crowd them on the roost, and do not crowd them on the range. There is such a thing as having too many hens together in the field as well as in the poultry-house. Above all, do not crowd them in the house. A dozen hens will greatly increase the temperature of a house, and on very warm nights they are anything but comfortable, while such condition is the best for the propagation of lice.

## INQUIRIES ANSWERED.

**Bishop's Brooder.**—J. B., Teague, Tenn., writes: "Please give a simple plan of the Bishop brooder."

**REPLY:**—We have no better plan than the one we illustrated, which is very simple.

**Effects of Roup.**—Mrs. A. A., Hinsdale, Ill., writes: "What ails my hens? Last winter I noticed a bunch as large as a pea on the side of a hen's face, which grew until it closed her eye and turned her beak so that she could not eat. The disease takes months to develop, and I have more hens becoming affected the same way."

**REPLY:**—The disease is scrofulous, and due to roup having attacked the hens at some time. The fact that other hens are being affected is sufficient to show that such hens should be destroyed and others substituted in their place.

**Probably Lice on Turkeys.**—G. F., South Rockwood, Mich., writes: "My turkeys begin to droop, go around with their eyes shut, stagger about and die."

**REPLY:**—The probability is that they are afflicted with lice, though such symptoms occur also when fowls have been subjected to overhead draughts of air at night. Dust them well with insect powder, and anoint their faces and heads with lard oil.

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## Querries.

READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should enclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query, in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

**Book on Painting.**—J. D. M., Vowinkel, Pa. Send for "How to Paint," published by S. R. Wells & Co., 737 Broadway, New York.

**Book on Wine Making.**—C. F., Connellsburg, Pa. Get Phinix' Grape Growing and Wine Making, sold by the Orange Judd Co., New York.

**Market for Golden Rod.**—F. C., North Urbana, N. Y., asks if there is a market for golden rod. Golden rod is bought and sold by wholesale druggists. They will tell you how to prepare it.

**Peanut Culture.**—W. H., Queen City, Tex. Plant and cultivate peanuts just as you would beans. Keep the ground loose and mellow, and the pods will push their way into it and cover themselves at the right time.

**Lime as Fertilizer.**—S. S. D., Boulder, Colo. Lime is not, strictly speaking, a fertilizer, but its action on the soil makes the plant food already there available for crops. It will be necessary for you to determine, by experiment, just how much lime your land needs or will be benefited by it. When used, fresh burned or slacked lime is applied broadcast at the rate of fifty to one hundred bushels per acre.

**Top-dressing Meadows.**—D. B. B., Abram, Wis. Meadows can be top-dressed with fine, well-rotted stable manure in the spring or fall. In the spring, harrow and cross harrow with a sharp-toothed implement, and follow with a good roller. Do this just as soon after the frost is out of the ground as it is firm enough for the horses to walk over. As to cotton-seed meal for a top-dressing, better feed it to cattle, and carefully save and apply the manure.

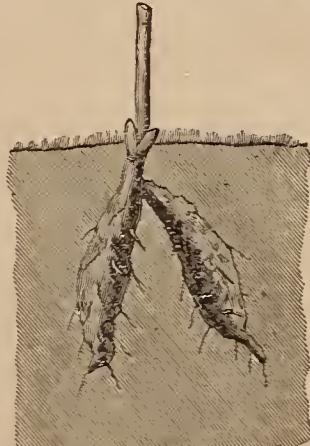
**Machine for Gathering Stones.**—P. W. M., New Canaan, Conn., writes: "I have for several years looked for such a machine, badly needed in this region, as we have very stony ground here. Most of them are cobbles, ranging in size from a hen's egg to a quart measure. What we want is a machine of some kind to take them out of the surface soil and rake them in windows. Can it be made?"

If any of our readers know of such a machine, please tell about it.

**Concrete Cisterns—Filter—Pumps.**—C. L. S., Avilla, Mo., writes: "Would it be best to wall a cistern with concrete of cement, sand and gravel, or would it be sufficiently solid to plaster right on the dirt?—What kind of filter is best?—Would a chain pump be better in keeping the water pure than a galvanized iron force pump?"

**REPLY.**—If your cistern has a firm, clay wall, without any small veins of water running into it, you can put a cement plaster directly on the dirt wall, and make a good cistern. If the dirt wall is not solid, or leaks, better build a brick or concrete wall.—A filter made of gravel, sand and charcoal is good. It should be so constructed that the materials in it can be easily and frequently renewed.—A chain pump will aerate the water better than the other, and thus keep it purer.

**Ginseng.**—C. J. J., Rock Hill, Mo. In reply to your query we republish the following: "Ginseng (*quinquefolium*) is a member of the



skunk family, and indigenous to this country. The plant grows about a foot high, and divides at the summit into three leaf-like stalks, each bearing a compound leaf composed of five or more leaflets. Rising from the axis of these leaf stalks is an umbel of small, greenish flowers, which are succeeded by scarlet, kidney-shaped berries. The root is fleshy, spindle-shaped, two to three inches long, and terminated by a few slender fibres, as shown in the engraving. It is slightly odorous, and has an aromatic taste, not unlike that of licorice root. It is of little value as a medicine, and most of the product collected in this country is shipped to China, where it is thought to possess almost miraculous efficacy as a medicine for all diseases. In America it is sometimes chewed by persons who relish its taste, and this occasions what little demand there is here for the roots."

**Castor Bean Culture.**—D. B. K., Lanark, Ill. In answer to your query, we republish, from FARM AND FIRESIDE, the following: "The castor bean plant wants a warm, rich soil, and with good culture, will yield, south of the 40th parallel, fifteen to twenty bushels per acre, but the average is not over ten bushels. The soil should be put in thorough condition and the beans planted at the same time and in the same manner as corn, except that they should be planted in hills about five feet apart each way, three or four beans to the hill, and every seventh row should be planted with navy beans or potatoes, to permit the passage of a wagon in harvesting. The culture consists in thinning the plants to one in each hill, when about six inches high, and in keeping the ground loose and clean. The harvesting should begin when the pods begin to crack, which will be some time in August. A wagon is driven along the open rows, the ripe pods gathered and thrown into it and carried to the drying yards, which should be made like an old-fashioned threshing floor, and preferably upon the southern slope of a dry knoll. The heat of the sun does the threshing by causing the pods to pop open. Rain should be avoided if possible. After being threshed, the beans are cleaned by a fanning mill, and spread upon a barn floor for further drying. Where sufficient quantity is raised, it is better to have

drying houses for both pods and beans. St. Louis is the castor bean market. You can get seed of the St. Louis Plant Seed Co., St. Louis, Missouri."

## VETERINARY.

Conducted by Dr. H. J. Detmers, Veterinarian of the Ohio Agricultural Experiment Station, and Professor of Veterinary Surgery in Ohio State University.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should enclose a fee of one dollar, otherwise no attention will be paid to such request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to DR. H. J. DETMERS, 35 King Avenue, Columbus, Ohio.

**Swine Plague.**—W. C. B., Leo, Ohio. Your hogs are affected with swine plague, or so-called hog cholera.

**Barren Heifer.**—W. B. F., Glasgow, Conn. Not knowing the cause of your heifer's barrenness, I cannot advise you.

**Farcy.**—T. D. C., Otterbourne, Kau. If your horse has farcy, you must keep the animal separated from other horses, and will have to notify your state veterinarian.

**Malignant Tumor.**—W. H. R., Catawissa, Pa. Your description points toward a malignant tumor, perhaps a sarcoma in the maxillary sinus. If such is the case, there is no cure. But before you destroy the animal, have the same examined by a competent veterinarian.

**Garget.**—A. E., Highland, Ill. Your cow had garget. Thorough, frequent and persistent milking would have constituted the remedy. The milk in such a case coagulates, and the clots thus formed must be removed, else they act as foreign bodies. As soon as the clots have been removed, nature will take care of the rest.

**Lameness.**—W. K., Coal Harbor, N. D. Lameness is a disease which has an existence only in the imagination of quacks, and when you speak of "stiffness in shoulder" that may prove to be "sweeny," I do not know what you mean. If your horse is lame, have him examined by a competent veterinarian; or, if none is available, ascertain yourself where the seat of the lameness is, and then report again.

**Fly-bitten.**—G. R., Atlanta, Ark., writes: "I have a mare that has little nicked places all over her, in the spring and summer, about the size of buck-shot; then the skin turns dry and dead, and the hair all comes out of these little places and grows in again of a different color."

**ANSWER.**—What you complain of, it seems, is caused by insects, or flies. I do not know of any treatment. The prevention would consist in keeping off the flies.

**Hydruria.**—B. S. S., Vanderbilt, S. D., writes: "I have a horse four years old that makes water too often. He does not have to work overhard, is more of a saddle-horse, and drinks mostly from an iron spring. We drink the water and it is healthy, cool and clear."

**ANSWER.**—There is probably something the matter with the food of your horse. Perhaps the oats are miliary or the hay may be dusty, full of fungus, spores, etc. Change the food and give nothing but what is perfectly sound.

**A Clicking Sound.**—A. N. M., Dent's Run, Pa., writes: "I have a young mare that has a clicking or snapping in her right fore shoulder. She has never been worked, or hurt in any way, unless by running when in the field. She is not lame. When she lifts her foot it clicks, or snaps."

**ANSWER.**—I cannot tell you, unless it is weakness, what produces that clicking or snapping sound. Feed well, and give sufficient exercise.

**Holds Back Her Milk.**—A. W., Hoxie, Kan., writes: "Is there any way known to prevent a cow from holding back her milk or breaking her of the habit after she has acquired it? My cow holds up her milk when about half through with milking, and nothing but the calf can start it again. She is gentle otherwise."

**ANSWER.**—The only thing I know of to compel a cow to let down her milk, is to milk vigorously and crosswise; for instance, the left fore and right hind teat together, and vice versa. Try it, but don't cease milking until the cow has yielded.

**So-called Big Head.**—H. H., Xenia, Ill., writes: "I have a three-year-old mare that has an enlargement on her face on each side just below her eyes. They seem to be soft."

**ANSWER.**—There may be various causes, and the morbid changes produced may differ accordingly. In young animals such swellings are most frequently caused by bruising. The roots of the teeth are long, and the bone is thin, hence, bruising must be avoided. By way of treatment you may apply, once every four days, a little biniiodide of mercury ointment, composed of one part of biniiodide of mercury and twenty-four parts of lard, thoroughly mixed and triturated together.

**Rheumatic Arthritis.**—R. W. G., Liberty, Mo., writes: "I have a calf three weeks old, which, when one week old, became lame in one hind foot and it is growing worse all the time."

**ANSWER.**—Your calf suffers from so-called rheumatic arthritis. Take tincture of iodine and tincture cantharides, equal parts, and rub it on the sides and front of the swollen joints, but not in the bend of the same. As tincture of iodine will stain the hand, it will be well to cover the latter with a piece of bladder. Keep your stable clean and well ventilated, and don't give overheated or spoiled milk to young calves.

**Won't Fatten.**—R. T. J., Gypsum, Texas, writes: "I have a cow that is poor and will not fatten, though she has good grass. I think she has hollow tail or hollow horn, though I do not know the symptoms of either disease. How can I tell if she is thus afflicted and what shall I do for her?"

**ANSWER.**—There are no such diseases as hollow horn or hollow tail, which simply are terms used to hide ignorance. It is probable that your cow suffers from chronic indigestion, a degeneration of the mesenteric and other lymphatic glands, or, may be, she is affected with tuberculosis. A definite diagnosis in such a case requires an examination.

**Scrotal Hernia.**—W. H. H., Kendall Mills, N. Y., writes: "I have a sucking colt that has hernia, or rupture, filling the scrotum and extending forward to the sheath. I first noticed it about ten days ago, although from the time of foaling his scrotum has been of a peculiar shape—somewhat elongated. Can this be permanently cured, and should it be treated immediately, or wait till the colt is older?"

**ANSWER.**—A scrotal hernia is easily and

permanently cured by castration with covered testicle. As every well-informed veterinarian knows how to perform the operation, it will not be necessary to describe it. I will advise you, though, to wait with the operation until the colt is older—perhaps until next spring.

**Something Looks Like Warts.**—J. A. L., Leaksville, N. C., writes: "I have a very fine mule that has something on one of its hind legs that looks like warts. The leg is swollen some. The mule is in good health and keeps in good order. They extend all the way up to its body and look very red."

**ANSWER.**—The best advice I can give you is to have your mule examined by a veterinarian. You say it is something that "looks like warts," but do not say it is warts. How, then, can I know? Your description fails to furnish any basis for a diagnosis. It may be warts, but it may also be a chronic inflammation and ulceration of the lymphatics, or even something worse—farcy.

**Lung Worms.**—W. A. R., McCall'sburg, Iowa, writes: "My pigs have a bad cough, and their mothers did before they were farrowed. The pigs are three months old, run in a good timothy and clover pasture and are fed well. They are always ready for their feed and thrive well, but when I call them they come coughing, and when they drink will or eat they have to stop and cough."

**ANSWER.**—Your pigs, it seems, have lung worms (*Strongylus paradoxus*). There is no remedy. You, however, may prevent the disease in the future, if you keep your pigs away from any stagnant pools of water, mud-puddles, etc., and from low and wet ground. Besides that they should be watered exclusively from a good well, and be kept on dry ground.

**Cutaneous Eruption.**—B. N. B., Westfield, Mass., writes: "My horse has a number of little, raised blotches, which seem to itch more or less, about the shoulders and back. The blotches vary in size, and do not remain in the same place. In the early summer I fed him altogether on green grass, when the blotches showed more and itched worse. I cannot feed much grass now. The blotches do not show much in winter."

**ANSWER.**—Such a case requires a thorough examination. There are several kinds of cutaneous diseases, all more or less similar in appearance, and at least most of them caused by parasites; hence, the necessity of an examination. If the parasites are found, the diagnosis is secured. For further information I refer you to what has been said in regard to mange, in recent numbers of this paper.

**Periodical Ophthalmia.**—F. E. K., Hawkin'stown, Va., and A. J., Waverly, Mo. The mare and horse asked about by the above, are both affected with periodical ophthalmia or so-called moon-blindness, which latter term, however, is a misnomer. The disease, which is caused by yet unknown agencies, must be considered incurable, and, as rule, terminates in blindness. Temporary relief may be afforded, and an unsightly contraction of the pupil may be prevented, by the following treatment: Take finely triturated calomel, one drachm; fresh extract of belladonna, one drachm; water, a few drops, and pure olive oil, one and one half ounces; the whole to be mixed in such a way as to form an emulsion. Of this emulsion a drop may be applied two or three times a day between the eyelids, by means of a glass pipette capped with a rubber bulb. If you desire to apply this treatment, your druggist will make you the emulsion, and will instruct you how to apply it. Proper diet, a clean, well-ventilated stable, and moderate exercise, or at least exemption from hard work, are also essential. Mares affected with this disease should not be used for breeding, because an hereditary predisposition for the same affection will, as a rule, manifest itself in her colts.

**Veterinary Schools.**—R. F. H., Newtonville, Ind., writes: "Will you please inform me where there is a good veterinary school, and what qualifications are necessary for admission?"

**ANSWER.**—There are several veterinary schools or colleges in America, but most of them are private institutions, owned and managed by private parties. Only three are state institutions, and these three are all in the United States. One of them is in Massachusetts, connected with Harvard University; one is in Pennsylvania, connected with the university of that state; and one is in Ohio, connected with the Ohio State University, at Columbus. In this last-named veterinary school the instruction given by six professors and two assistants is a thorough one; the facilities are good, and in a few months will be first-class; and tuition being free, the expenses are lower than anywhere else. Only \$5 a term has to be paid as incidental fees, and a very moderate charge is made for the material used by the students in

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the laboratories. At the completion of a full course, which is three years, the degree of Doctor of Veterinary Medicine is conferred by the trustees. Expenses for board and room rent are very moderate.

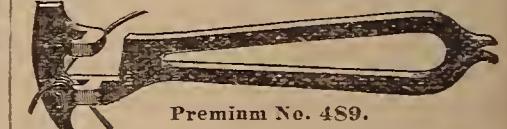
**A Fistula.**—J. H., Bangor, South Dakota, writes: "My three-year-old colt got stuck with a pitchfork in his side. From the second day after this happened the wound has been running, but now feels hard around it. The wound is in the middle of the nine last ribs. I keep it clean with a light solution of carbolic acid, but it does not heal up at all. What must I do to cure it?"

**ANSWER.**—The wound, evidently, has assumed a fistulous character; hence, first, its extent and direction must be ascertained by careful probing, and if it is found that the pus formed cannot be freely discharged from every point, some cutting to make this possible will be necessary. Further, as the inner surface of the fistulous canal is hard and callous, and prevents a healing, it must be destroyed, perhaps by caustics. If the canal is a simple one, extends upward, and has no lateral cavities, injections with a concentrated solution of sulphate of copper will answer the purpose. But if the canal is complicated, it may be necessary to lay certain portions of it bare by cutting, so as to make them accessible. The treatment, in short, has to be the same as that of a so-called poll-evil, or of a fistula on the withers. Still, if some cutting has to be done, I most decidedly advise you to have the operation performed by a good veterinarian; or, if none can be had in Dakota, by your family physician. A fistula can be brought to healing only when the healing process commences at the bottom.

**TO HORSE OWNERS.** I HAVE A POSITIVE CURE FOR RINGBONE, Spavin and Clingfast, and I will send this easily prepared Recipe for only 25c. silver. Worth \$10 to any horse owner. L. Brainard, Comstock's Bridge, Ct.

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In combination with the Wire Splicer is a Staple Puller. Every one knows how hard it is to get the staples out of a fence post. With this little tool and a hammer they can be taken out as fast as the puller can be placed in position. The same tool also has a claw for drawing light nails or tacks, and the handle is in shape to use for a light wrench; the hook is very useful for handling barbed wire and protecting the hands from injury. Thus there is combined in this one tool half a dozen that would cost separately one or two dollars. The only trouble with the little implement is that it is so handy that every one in the family that gets hold of it will want to keep it. Directions for use go with each tool.

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## Our Miscellany.

## A PLEA FOR EGGS.

Be gentle to the new-laid egg,  
For eggs are brittle things;  
They cannot fly until they're hatched,  
And have a pair of wings.  
If once you break the tender shell,  
The wrong you can't redress;  
The yolk and white will all run out,  
And make a dreadful mess.

'Tis but a little while at best  
That hens have power to lay;  
To-morrow eggs may addled be,  
Although quite fresh to-day.  
So let the touch be very light  
That takes it from the keg;  
There is no hand whose cunning skill  
Can mend a broken egg.

—A. Cowles, in *Hartford Times*.

NEVER borrow trouble. The interest you have to pay for the accommodation is excessive.

AIR the house thoroughly every morning. Open opposite doors and windows for five or ten minutes, even if it is stormy.

Good temper, like a sunny day, sheds a brightness over everything. It is the sweetener of toil and the soother of disquietude.

It is a melancholy fact, and much to be regretted, that good people who want only what is right, often get what is left.—*Dallas News*.

Who would succeed in the world should be wise in the use of his pronouns; utter the "you" twenty times where you once utter the "I."

ONE of the hard things in this world is that we never know that there is an ounce of prevention until after we have taken our pound of cure.

MAKE all good men your well-wishers; and then, in the years' steady sifting, some of them grow into friends. Friends are the sunshine of life.

THE last census in New Zealand reveals the interesting fact of a profession of religion on the part of no less than 95 per cent of the whole population.

IF you are a tall woman, have your work-table and ironing-board a few inches higher than they are usually made. This little precaution will prevent many a backache.

How much trouble he avoids who does not look to see what his neighbor says or does or thinks, but only to what he does himself, that it may be just and pure.—*Marcus Aurelius*.

MRS. TALMAGE, wife of the celebrated preacher, is said to be the financier of the family. It is she who makes all the doctor's engagements and does his banking business.

THERE is this difference between happiness and wisdom: He that thinks himself the happiest man, really is so; but he that thinks himself the wisest, generally is the greatest fool.

ANY one desiring a picture of the "Blue Grass Palace," and printed matter descriptive of south-western Iowa, can secure the above by sending their address to G. E. McELWAIN, Sec'y, Creston, Iowa.

ONE of the finest of the firework pieces at the London Crystal Palace, this season, is a representation of the falls of Niagara. It is 50 by 100 feet, and always elicits the cheers of the assembled crowds.

A DEVOTED Christian was in the habit of saying: "I am so busy in thanking God for his mercies, that I really have no time to spare for any complaints." The more we thank God the more occasion we shall see for doing so.

BEWARE of lightly condemning the action of others, the intention of our neighbor must be considered, and this is often right and pure, even though the actions, if not in the beginning, at least during their continuance or at their close, ruin the value of them.

FIRST Boy (gloomily)—"I've got to cut kindlings, and empty three buckets of ashes, and build two fires, and go to the store on an errand, and then fill the coal-bin." Second Boy (enviously)—"You've got a regular picnic, you have. Just think of me! Mother said, when I came home from school to-day, I'd gotter hold the baby."—*Racket*.

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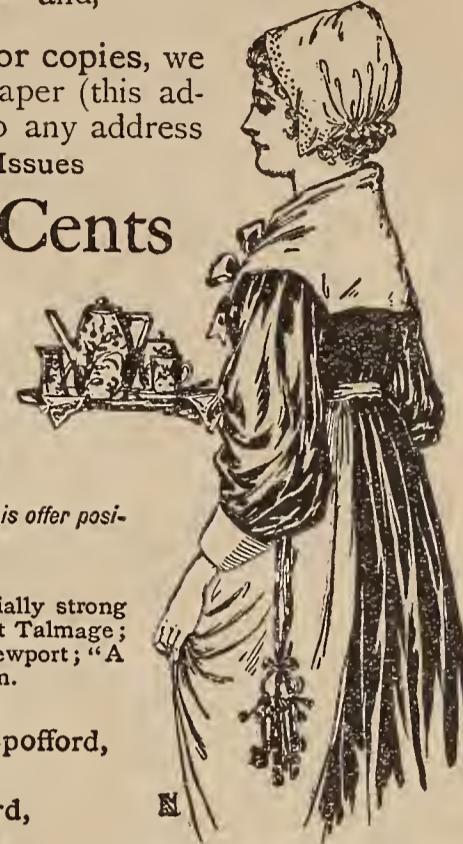
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55 East Lake St., Chicago, Ill.

## AUSTRALIA'S FERTILITY.

Professor E. M. Skelton, of Kansas, who was appointed government agricultural agent of Australia, writes enthusiastically of the agricultural and mining resources of the country. He says American farmers would be astonished at the products of Australian fields. Two or three crops are often grown in one year from the same ground. There are no checks to crops from cold weather, and no feeding season to be provided for. Fruits of all kinds

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ALL of the above mailed for 10 cents if ordered at once. This offer positively withdrawn 30 days from date of this paper.

THE last two issues of the JOURNAL contain some specially strong features, including "My First Sermon," by Dr. T. De Witt Talmage; an interesting article on "Promiscuous Bathing;" "Gaities of Newport;" "A Country Courtship,"—a full-page, handsomely-illustrated poem.

Illustrated stories and articles in these issues by

Mrs. A. D. T. Whitney,	Harriet Prescott Spofford,
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seen it expresses admiration for this great work of art. I intend to have it framed.

MINNIE A. OBERMAN.

ELK CREEK, PA., Nov. 30, 1890.

We received the picture, "Christ Before Pilate," and are much pleased. We are surprised that you give us so much for the money. What is the world coming to? I have an oil painting of Benjamin Franklin, got in 1844, that cost \$25, and is no nicer than "Christ Before Pilate." What can I say, and what can I think? Well, I think we are living in the millennial day; it has surely dawned, and with all the experience of the world today, what can we expect for the future.

DANIEL B. ROBINSON.

WINCHENDON, MASS., Feb. 17, 1890.

I received the picture, "Christ Before Pilate," and would not take \$12 for it.

GEO. F. PIERCE.

SEIVERN, S. C., May 7, 1890.

I received the picture, "Christ Before Pilate," in good order. I cannot find words to thank you as I wish. I would not be without it for any price. I hope to see the picture in every house.

EUGENIA I. RICHBOURG.

LINDSEY, GA., April 28, 1890.

I received my picture, "Christ Before Pilate," and it is much better than I expected. I would not take anything for it.

SUSIE A. STEVENS.

GREGORY, MICH., April 7, 1890.

I would not take \$10 for the picture, "Christ Before Pilate," which I received from you.

MISS ADA LOOMIS.

HOWARD CITY, MICH., March 15, 1890.

I have just received my picture, "Christ Before Pilate." I would not part with it for \$10 if I could not get another like it.

JENNIE R. STUCK.

MAPLETON, N. Y., July 24.

The picture, "Christ Before Pilate," came in good time. Am very grateful for it, and consider it a very fine one. I saw the original at Buffalo last fall, and was happily surprised in this; did not think you would get one so perfect. It was a happy thought in you to so kindly place it in so many homes in our fair land.

THALIA E. SMITH.

PALMOUR, GA., April 29, 1890.

I received the Peerless Atlas some time ago, and am very well pleased with it. It is worth ten times the amount I paid for it.

A. N. PARKS.

CLAYTON, OHIO, April 27, 1890.

The Peerless Atlas came safe and we prize it highly. Indeed, we would not part with it unless we were sure we could get another. Many thanks for your promptness.

MRS. MARTHA M. EVANS.

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## Smiles.

## OLD AUNT MARY'S.

WASN'T it pleasant, oh, brother mine,  
Of youth, when the Saturday's chores  
were through,  
And the "Sunday wood" in the kitchen, too,  
And we went visiting, "me and you,"  
Out to old Aunt Mary's!

It all comes back so clear to-day,  
Though I am as bald as you are gray—  
Out by the barn-lot and down the lane  
We patter along in the dust again,  
As light as the tips of the drops of the rain,  
Out to old Aunt Mary's!

We cross the pasture and through the wood  
Where the old gray snag of the poplar stood;  
Where the hammering "red-heads" hopped  
awry,

And the buzzard "raised" in the "clearing"  
sky  
And lolled and circled as we went by,  
Out to old Aunt Mary's!

And then in the dust of the road again  
And the teams, we met and the countrymen;  
And the long highway with sunshine spread  
As thick as butter on country bread,  
Our cares behind and our hearts ahead,  
Out to old Aunt Mary's!

Why, I see her now in the open door  
Where the little gourds grew up the sides and  
o'er

The clapboard roof! And her face—ah, me!  
Wasn't it good for a boy to see,  
And wasn't it good for a boy to be  
Out to old Aunt Mary's!

And, oh, my brother, so far away,  
This is to tell you she waits to-day  
To welcome us. Aunt Mary fell  
Asleep this morning, whispering, "Tell  
The boys to come!" and all is well  
Out to old Aunt Mary's!

—James Whitcomb Riley.

## THE TELLER CAME TO TIME.

THE autocratic paying-teller of a certain Nassau street bank had an unpleasant experience the other day. A tall young man, with whiskers trimmed as though they had been laid out by a landscape gardener, hurried up to the window and presented a check for \$250.

"Please let me have it in—" he began.

"Mind your own business," snapped the red-headed autocrat within. "I'll give you what is convenient."

The tall young man, following this advice, took the money handed him and started away. In a moment, he returned. "You've made a mistake," he said, mildly.

"Not responsible for any mistakes after leaving the widow," responded the paying-teller, sharply.

"But you—"

"We make no corrections; move on."

"Oh, very well," said the tall young man, cheerfully, waving a bill at the grating, "I was only going to tell you you had given me \$50 too much, but I can stand it if you can!" he added, as he turned away.

The change that came over the red-headed teller was extraordinary.

"Hey there, hold on," he called.

"Mind your own business, I shall suit my own convenience."

"But wait a moment," called the teller, growing more and more agitated, as he hastily unlocked the window and thrust out his head.

"Don't grow excited," responded the overpaid young man, soothingly, "we never make corrections after leaving the window."

"Oh, don't mind that, come back here," pleaded the head from the window, beseeching.

By this time the dialogue was attracting attention, and the tall young man stepped up to the teller, and said, sharply:

"I have come to you again and again with checks to be cashed for the firm, and you are always grumpy, ungentlemanly and disengaging. To-day, you thought you had underpaid me, and you were going to let me suffer. Instead of that, you gave me \$50 too much, and I have got you just where I want you. If you will apologize for your meanness, and agree to be pleasant and obliging hereafter, you can have the \$50 back, but under no other condition."

Those who listened did not bear what the paying-teller answered, but his meek tone and the return of the \$50 bill told a sufficiently plain story.—*New York Tribune*.

## HOW HE LOST THE TRADE.

Bill Nye, writing about real estate in western towns, says:

A friend of mine was telling about how he lost a trade in Spokane Falls. He had the refusal for a week of a twenty-four foot business lot "at \$500." He thought and worried and prayed over it, and wrote home about it, and finally decided to take it. On the last day of grace he counted up his money, and, finding that he had just the amount, he went over to the agent's office with it to close the trade.

"Have you the currency with you to make the trade cash?" asked the agent.

"Yes, sir, I have the whole \$500 in currency," said my friend, drawing himself up to his full height, and putting his cigar back a little farther in his cheek.

"Five hundred dollars," exclaimed the agent, with a low, gurgling laugh; "the lot is \$500 per front foot. I didn't suppose you were a Paul-American ass enough to think you could get a business lot in Spokane for \$500. You can't get a load of sand for your children to play in at that rate."

## WHY HE DIDN'T GET ANY WATER.

At a recent Sunday-school service, the clergyman was illustrating the necessity of Christian profession in order properly to enjoy the blessings of Providence in this world, and to make it apparent to the youthful mind, he said: "For instance, I want to introduce water into my house. I turn it on. The pipes and fountains and every convenience are in good order, but I get no water. Can any of you tell me why I do not get any water?" He expected the children to see that it was because he had not made a connection with the main in the street. The boys looked perplexed. They could not see why the water should refuse to run into his premises after such faultless plumbing. "Can no one tell me what I have neglected?" reiterated the good man, looking over the flock of wondering faces bowed down by the weight of the problem. "I know," squeaked a little five-year-old. "You don't pay up!"

## MAY AND DECEMBER.

Aged Groom—"My dear, I have bought the palace you most admired, the horses you most liked, and all the jewelry you took a fancy to. Is there nothing else I can buy for you?"

Young Bride—"No, indeed, my love, don't get anything more for me. Buy something for yourself, my dear. Buy a cemetery lot."—*New York Weekly*.

## TIT FOR TAT.

Miss Vasser—"Don't you think Miss Springlove is a charming poetess?"

Uncle Solomon—"Oh, yes, a very sweet poetess, and her cousin, Miss Chalmers, is a charming painteress, and her Aunt Lucrece is an excellent sculptress, and her mother used to be an excellent dish washeress, and—"

## NO DOUBT OF IT.

"Well, Mrs. Brown, how does your daughter get along on the piano?"

"Law sakes, Mrs. Jones! You know I ain't no musician myself; but I did hear her teacher say only yesterday, 'Emma, my child, you're quite ten bars ahead!' so she must be makin' some progress, msn't she?"

## WOULD NEVER DO.

"Your references are very satisfactory, but I cannot engage you."

"May I inquire why not, madam?" asked the would-be butler.

"Your hair is red, and my dining-room is decorated in robin's-egg blue."—*Life*.

## LITTLE BITS.

Pat—"Workin' now?"

Mike—"Yis; lookin' for a job."—*West Shore*.

Temperance Lecturer—"Friends, how can we stop the sale of liquor?"

Inebriate (in rear of hall)—"Give it away."

"Papa," remarked the senator's daughter, looking at the clock.

"What is it, Lou," asked papa, who had lingered in the parlor with the young people.

"It is nine o'clock. At this time, George and I usually go into executive session."

Then papa retired.

Pat (who is being lowered into a well)—"Stop, will ye, Murphy? Oi want to coom up agin."

Murphy (still letting him down)—"Phat for?"

Pat—"Oi'll show ye. Af ye don't shtop lettin' me down, Oi'll cut the rope!"

"Oli, I think it's lovely to be married," said young Mrs. Tocker to the lady on whom she was calling, "especially when you have a husband who is not afraid to compliment you."

"What does your husband say?"

"He said yesterday that I was getting to be a perfect Xantippe."

"A Xantippe! Do you know who she was?"

"Oh, yes; I asked Charley afterward, and he told me she was the goddess of youth and beauty."



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CALIFORNIA.—(Berkeley) Report on the agricultural experiment stations of the University of California, with descriptions of the regions represented.

ILLINOIS.—(Champaign) Bulletin No. 9, May, 1890. Milk and butter tests.

KANSAS.—(Manhattan) Bulletin No. 10, May, 1890. Notes on conifers, for Kansas planters.

NEW JERSEY.—(New Brunswick) Annual report for 1889.

NORTH CAROLINA.—(Raleigh) Bulletin No. 71, May 15, 1890. Co-operative field tests during 1889. Hill-side ditches.

TENNESSEE.—(Knoxville) Bulletin No. 2, Vol. 3, April, 1890. Tests of varieties of corn, oats, wheat and sorghum. Methods of culture of wheat, and effects of fertilizers on oats and on clover.

NEW MEXICO.—(Las Cruces) Bulletin No. 1, April, 1890. Announcements.

UTAH.—(Logan) Bulletin No. 1, June, 1890. Investigations in progress at the station.

UNITED STATES DEPARTMENT OF AGRICULTURE.—(Washington, D. C.) Experiment station record No. 5. Proceedings of the third annual convention, Association of American Agricultural Colleges and Experiment Stations. Farmers' bulletin No. 2. The work of the agricultural experiment stations of the United States. Annual report for 1889.

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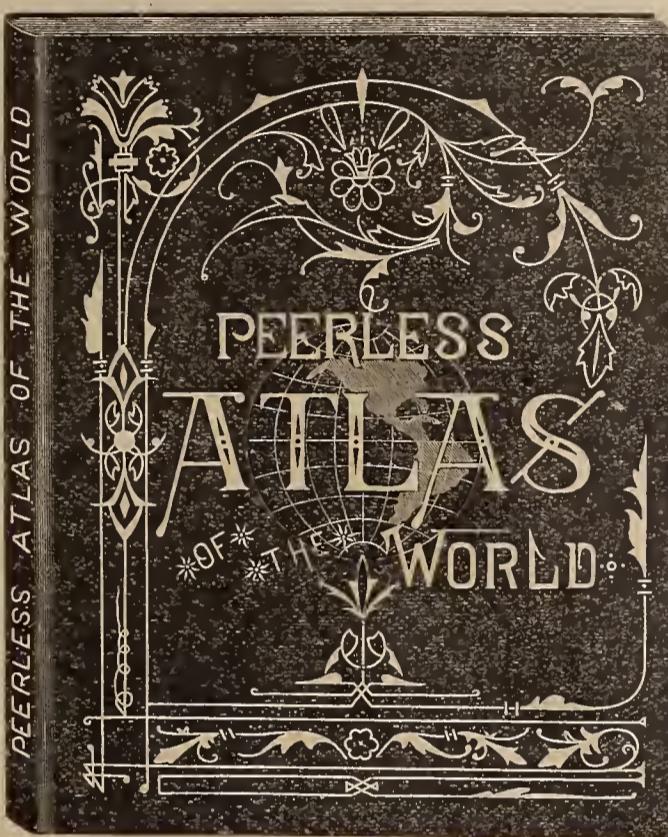
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Common...	3 1/2 @ 6	7 @ 10	6 @ 10
GRAIN.			
Wheat No. 2 w'n't'r	92 @ 93 1/4	95 1/4	
Corn, "	45 @ 47 1/4	44	50
Oats, "	33 @ 36	39 @ 42	42
LIVE STOCK.			
Cattle, Extra...	4 85 @ 5 00	4 00 @ 4 80	
" Shippers...	3 50 @ 4 80	3 75 @ 3 85	2 50 @ 3 00
" Stockers...	2 25 @ 3 60		
Hogs...	3 65 @ 3 95	4 25	3 25 @ 4 50
Sheep, com. to good	4 10 @ 5 25	4 00 @ 5 75	2 50 @ 3 25
" Lambs...	4 75 @ 5 75	5 85 @ 7 62 1/2	
PROVISIONS.			
Lard...	6 02 1/2	6 02 5 37 1/2 @ 5 50	
Mess Pork...	12 25	12 75 @ 13 50	12 75 @ 13 00
SEEDS.			
Flax, No. 1...	1 36		
Timothy...	1 53		
Clover...	4 40		
WOOL.			
Fine, Ohio & Pa...			
" Western...	16 @ 21		
Medium, Ohio & Pa...			
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" Unwashed...	24 @ 26		
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# FARM AND FIRESIDE

EASTERN EDITION.

VOL. XIII. NO. 23:

PHILADELPHIA, PA., and SPRINGFIELD, OHIO, SEPTEMBER 1, 1890.

TERMS { 50 CENTS A YEAR.  
24 NUMBERS.

The Circulation of FARM AND FIRESIDE  
this issue is  
**250,500 COPIES.**

The Average Circulation for the 16 issues from  
January 1, 1890, to August 15, 1890, has been

**250,706 COPIES EACH ISSUE.**

To accommodate advertisers, two editions  
are printed. The Eastern edition being  
100,200 copies, the Western edition  
being 150,300 copies this issue.

Farm and Fireside has the Largest Circulation  
of any Agricultural Journal in the World.

## Current Comment.

WITH the brazen effrontery of a liar skilled by long experience, the *World's* "War on the Farmer" correspondent continues, in the August 13th issue of that paper, his malicious lying about FARM AND FIRESIDE. Nearly every statement made by him in his last article, and in the former one to which we replied, is a deliberate misrepresentation or a malicious falsehood. In our last issue we showed conclusively that the *World's* charges against us were false, and that both correspondent and editor were liars. Brought face to face with the evidence, Willson is utterly unable to truthfully deny this, and in his last article cowardly sneaks away and makes a weak attempt to delude his readers by falsely calling our reply a "retraction." We have not taken space, and shall not, to speak of each one of his numerous misrepresentations. There is no need. All that he has said, can say or will say on this subject is utterly discredited by the fact that he stands convicted of reckless and deliberate lying on evidence submitted in our last issue, in answer to which he is absolutely too helpless to say a true word in self-defense. For example, Willson said that the extract from the Oliver Plow Company's letter was a forgery of the most daring kind, and that their denial was published long ago. As a matter of course, he deliberately and recklessly lied when he said it. The extract was genuine, and taken from a letter dated May 30, 1890, signed by the manufacturers, and published in the June number of the Chicago *Farm Implement News*, as any reader who wishes may verify for himself. This one sample of his numerous falsehoods will serve to illustrate his contemptible condition, and show why it is unnecessary to pay any further attention to him.

If there is an American farmer who is deluded with the notion that the *World*, a political sheet with hostility to American industries and sympathy for foreigners and New York importers, is his real friend, his colossal stupidity is excelled only by the knavery of this hireling demagogue.

If the farmers of this country want to get their implements cheaper than the export prices quoted in the *World*, they can do so by clubbing together and buying them for cash. Here is a simple plan that will greatly benefit them. But they cannot possibly get any good from whole volumes of political sophistry and misrepresentation based on an unfair comparison between net trade cash and retail credit prices.

MUCH labor was wasted and money lost by attempts to produce sorghum sugar in portions of this country where both soil and climate were unfavorable. Its area of profitable production is now about determined. As much attention is now being paid to the culture of beets for sugar, all who are interested should profit by the experience with sorghum, and before engaging in the new industry should possess all that is known about it. A very much larger area of this country is adapted to the production of sugar from beets than from sorghum, but there are many chances of repeating the failures made with the latter. These can be avoided. The Department of Agriculture, Washington, has just issued a bulletin on beet sugar, which should be in the hands of every one contemplating the business.

There are good reasons for believing that the beet-sugar industry will, in the near future, be successfully established in this country, but it is worse than needless to rush into it blindly and attempt to grow the beets where soil and climate are unsuitable, or to attempt to manufacture sugar with a plant too small for any possible profit. Beet-sugar production is not likely to be profitable on a small scale. The bulletin mentioned contains valuable information on the subject.

IN the political movement that is sweeping over the country, the farmers of Ohio are right in line with their brethren in other states. In convention assembled they have decided to take whatever political action is necessary to have their interests guarded in national and state legislation. On August 13, at Columbus, Ohio, several hundred delegates, representing nearly every county in the state, met and held one of the most important conventions in the history of the state. These delegates were sent to this convention from the Alliance, the Patrons of Husbandry, the Patrons of Industry and other farmers' organizations, for the purpose of uniting all for political action. The plan they adopted is an admirable one. The political course advised by the convention is clearly given in the following extract from the report of the committee on resolutions:

We are determined hereafter to hold each individual member of every legislative body strictly responsible for his own acts and votes. The plea of partisan exigencies will no longer have weight with intelligent farmers. Corporations, banks and syndicates have for years directed largely the legislation of the country. Partisan changes work no change in this respect.

Those interests, gorged with the wealth wrested from the hands that earned it, manage still to have their say, no matter which political party holds the reins of power. The farmers have waited long—too long—for the fulfilment of partisan pledges so lavishly made before election and so soon forgotten afterwards.

Farmers, we must take a new departure. Our political machines have not been doing our work in a satisfactory manner. What are we going to do about it? Various propositions are under consideration. It is suggested by some that a new machine must be tried; others, that a change of drivers is all that is necessary. We must agree upon one or the other course of action. The farmers must henceforth be a factor in politics, not the patient, burden-bearing ass of the present, content with an occasional thistle, but a wide-awake, intelligent, courageous directing power.

Can this condition best be reached by the

formation of a farmers' party, or making our influence felt in the control of existing parties? It is the sense of this convention that we should first thoroughly test the latter, and we hope we shall not be compelled to resort to the former alternative.

Some of the objects aimed at are set forth in the following resolutions, adopted by the convention:

### WE ARE IN FAVOR OF

Equal taxation upon all forms of property. The reduction of railroad passenger rates to two cents a mile.

Government control of railroads and telegraph lines as to rates and charges.

Unlimited coinage of silver, and making it legal tender for all debts, public and private.

The election of United States senators by popular vote.

Forfeiture of all unearned land grants.

Taxes, direct and indirect, as low as consistent with economical administration and good government.

Protection of pure food products from the ruinous competition of adulterated products.

The passage of a law nullifying the effect of the "original package" decision.

The passage of the Conger pure lard bill, and the rigid enforcement of our state and national pure food laws.

A graded income tax for corporations and individuals.

The Butterworth bill, preventing gambling in farm products.

The Rawlings bill, taxing flushed manufactured products.

The Australian ballot system.

School books at cost.

Reduction of fees and salaries of public officers.

The election of the dairy and food commissioner by popular vote.

### WE OPPOSE

The alien, non-resident ownership of land. The granting of passes to public officials.

To unite the various farmers' organizations of the state, and to carry out the plans of the convention, a permanent organization was formed under the name of the Ohio Farmers' Union, with Mr. S. H. Ellis, Springboro, Ohio, as president.

The convention is to be highly congratulated on the excellent work it has done. The Farmers' Union indorses no party, antagonizes none. It has not placed a state ticket in the field, but appeals to farmers to act independently, ignore party lines, and cast their ballots only for suitable candidates who will guard farmers' interests. This is the same course of political action adopted by the Farmers' League of the eastern states, and it has already received our hearty endorsement.

The convention was one of representative farmers, and it contained more than one delegate who would be a great credit to Congress. There were some impracticable men among the delegates, whose intemperate zeal for their political party came near destroying the harmony of the convention and defeating its objects. But the wise counsels of cool, level-headed men prevailed, and the convention sat down hard on the greenbacker, socialist, the radical free trader and the party prohibitionist. The demagogues, fanatics and partisans were outgeneraled at every turn, and did not gain a single point.

Excepting one of minor importance, FARM AND FIRESIDE heartily indorses the resolutions adopted. By indorsing no party, and taking an independent stand, the Farmers' Union is in a position to use all parties, influence all and reform all. It is in a position to accomplish more immediate results than in any other way. In the fall elections we expect to see a number of candidates elected by the active work of the Farmers' Union.

WITH Patrick Barry, whose death occurred at his home in Rochester, N. Y., in June last, the horticultural world has met with a great loss. There are too few men of his calibre, that a Patrick Barry could easily be spared or forgotten. We have admired him as a pomologist, as author, as business man and as presiding officer of horticultural meetings. He was a man, every inch of him.

While we do not feel inclined to bewail the provision of nature that *all* must die—Mr. Barry lived to a good age, being seventy-four years old at his death—we will at present draw one valuable lesson from his eventful life. The nursery firm of which he was a member has a worldwide reputation for integrity. There is no nursery in the world, nor ever has been, nor ever can be in future, of higher standing. Not even the slightest suspicion of trickery in any form, or of what might be called "sharp" business methods, was ever attached to Ellwanger & Barry. In all his other various enterprises Mr. Barry has been guided by this same high standard of business principles and practice. Nobody who ever had the good fortune to know him would have considered it possible that Mr. Barry, for the sake of a temporary advantage, could make a misstatement in any of his advertisements or catalogues. Whatever was written or said by him could be relied on as his true, bona fide sentiment. The large fortune which he accumulated during his active life was the direct result of this unbounded confidence with which the people could not help to be inspired. Altogether, his life is a brilliant example of the financial success resulting from generous dealing and from integrity beyond even a suspicion of sharp practices or indiscretion. It is a lesson which some of the seedsmen and nurserymen of our times may well take to heart, or be occasionally reminded of when they seem to forget that "honesty is the best policy."

JOSEPH.

THE food value of the grain is about one half that of the entire corn plant at maturity. It has been demonstrated that the silo is the best means of preserving the full food value of corn. The value of a good silo was never more apparent to farmers than it is this season. The severe drought that has prevailed over such a wide area has greatly diminished the yield of grain, and in many places of fodder also. The most of the food value of the corn crop this year is in the fodder. How to save it all is no problem with the farmer who has a good silo. The drought will give a new impetus to silo building.

THE Ohio State University offers a free scholarship to its two years' course in agriculture to one young man from each county in the state, who shall be approved by the president and secretary of the county agricultural society. This means a saving of \$40 to \$50 a year in college dues. The next college year opens September 17th. The secretary of the School of Agriculture, Prof. Wm. R. Lazenby, Columbus, Ohio, will send catalogues and full particulars.

## FARM AND FIRESIDE.

ISSUED 1st AND 15th OF EACH MONTH BY  
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The date on the "yellow label" shows the time to which each subscriber has paid.

When money is received the date will be changed, which will answer for a receipt.

Discontinuances. Remember that the publishers must be notified by letter when a subscriber wishes the paper stopped, and all arrearages must be paid. Do not fail to give your post office address.

When renewing your subscription, do not fail to say it is a renewal. If all of our subscribers will do this, a great deal of trouble will be avoided.

Also, give your name and initials just as now on the yellow address label; don't change it to some other member of the family; if the paper is now coming in your wife's name, sign her name, just as it is on label, to your letter of renewal. Always give your post-office address.

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## Our Farm.

## NOTES ON BRITISH FARMING.

BY AN ENGLISHMAN.

[Continued from our last issue.]

We may now consider in detail the various crops that form the staples of British agriculturists.

## CORN.

Corn is only conspicuous by its absence, for corn in England, or, as it is invariably called, maize, is not grown at all, although some friends of the writer in Kent have experimented with it of late years for fodder. On the continent of Europe corn is grown in all the gardens, to go into the soup.

## WHEAT.

Wheat is the great staple of the British farmer, if his land is not too poor, and it is sown both in the autumn and spring. In the writer's experience, red wheats, which are the hardest, especially red Lammes and Talavera, are the favorite varieties. What is called April wheat is a red-bearded variety that can be sown on land that may only have been cleared of turnips late in the winter.

Almost the invariable rule in England is to plant wheat after clover or "grass seeds." The plowing for this fall sowing is done at the end of September; the harrow follows on the plow and manure is drilled with the seed wheat. The rules for the selection of seed wheat most approved are always to purchase it so as to have a change of soil, and to prefer that which comes from a richer soil and an earlier climate than those of the land in which it is to be sown. The seed wheat is invariably pickled with bluestone, two ounces of which dissolved in water are used for each bushel.

Besides such fallows and clover lands, the wheat sowings in England are after potatoes, vetches or beans. In these cases the cleaning of the soil is a tiresome process, and in England the cultivation has to be carried on briskly or rain is apt to prevent the sowing altogether. The turnip crops are gradually consumed throughout the whole winter, so that the sowing of wheat may go on without intermission up to April, though it is only in very dry soils that sowing can be done to advantage in December and January. Most authorities advise from two to three bushels of seed to the acre, according to the date of the sowing, the latest requiring the most. But when the seed is drilled instead of being sown broadcast, a little more than half of this will suffice.

Horse-hoeing of the wheat crop is much

believed in in England and is the farmer's chief occupation during the spring months, but some believe that mere harrowing is better. By the free and judicious use of fertilizers on good and rich land, especially on farms where a great deal of cattle feeding is practiced, the yield of wheat in England is kept up to an average of thirty-five bushels an acre, and this last is the only kind of farm in which there has been any money during the last twenty years. During that period the writer has had occasion to compare the results on two adjacent farms. The first of these consisted of 156 acres only, of the richest red Devonshire soil. The other, consisting of 400 acres of uplands, was mainly made up of fairly good arable land, but the soil chiefly cold clays. In this case the profit on the smaller farm exceeded that on the larger at least three-fold.

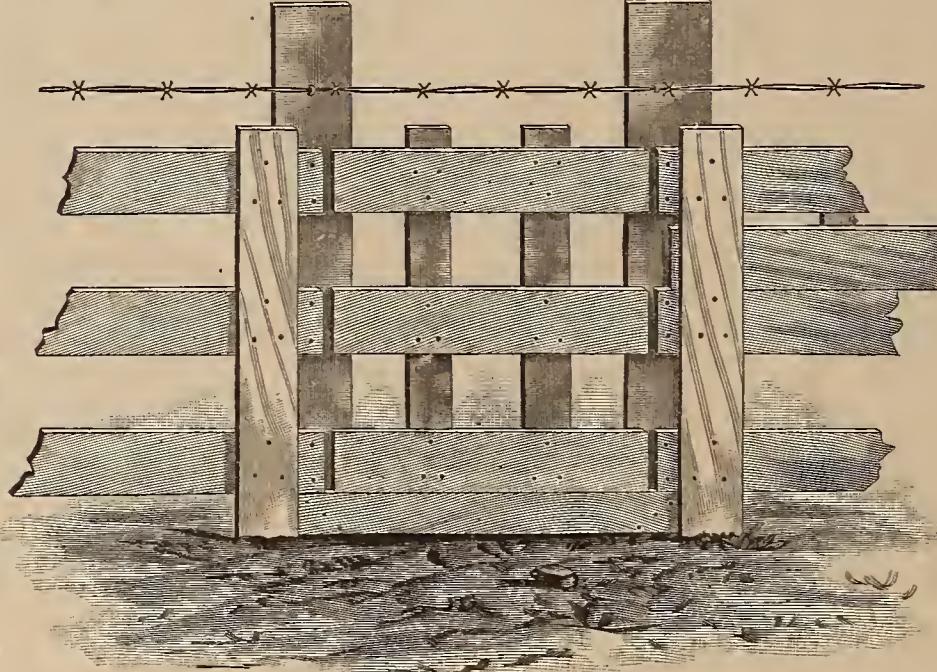
A system of thoroughly turning up the subsoil has enabled certain cultivators to dispense with manure altogether, growing crops of wheat for many years in succession, by alternating the strips of wheat with vacant spaces five feet wide, which were trenched in autumn so as to bring the subsoils to the surface. By this system thirty-six bushels an acre were averaged by one experimenter. As regards the influence of manure, Peruvian guano is relied upon chiefly to supply the needed ammonia. Each hundred weight of this manure is expected to increase the yield by four bushels, though in wet climates the increased vitality of the plant is liable to go to straw. The average yield throughout England is

machines were introduced very slowly, and even now nearly one half of the wheat crop is still reaped with the sickle. The reapers now have their only opportunity in the year for earning about a dollar a day. On an English farm at this time things are at their liveliest, and various ancient customs are still in vogue. One of these is a kind of mystic ceremonial or invocation, consisting of a prolonged, human howling in tones that gradually die away, becoming more and more weird. The writer remembers that in the harvest fields of his hoymhood the heroes or champion reapers had for him as nicknames Achilles, Ulysses and Ajax, from supposed resemblance of their characters to those of the Homeric Greeks. The mysteries of white magic possessed by the Ulysses in question are such as embellish the rural medicine man or superior genius of all the old countries. The harvest supper is the chief event of the year, and next to the festivities of Christmas eve and the burning of the yule log, is the chief event of English rural life. Of recent years, one section of the English church has revived the semi-religious ceremonials of the harvest home. It is the more frequent custom in England to stack the grain near the homestead, and a certain portion of the stacks are built upon the stack stool or staddle, which causes the grain to be ready for market much sooner.

[Concluded next issue.]

## THE DISAPPOINTMENTS IN HORTICULTURING.

I am a retired physician, and at the age of sixty-four commenced horticulture four years ago, for pleasure and health.



A Good Hog-Gate.

probably about twenty-six bushels per acre, and something short of two tons of straw. Some farms with light, rich soil, in the eastern counties, can get as much as six pounds an acre for the straws used for the straw plait.

## RYE AND BARLEY.

Rye is very little grown in England except on the poorest, sandy soils. But some have got into the way of growing it to feed sheep in early spring. English farmers are always very partial to growing barley when they can hope for a good crop. With a yield raised to sixty bushels an acre, and prices less at the mercy of competition, the cultivator is pretty sure of reaping a handsome profit. In Scotland, barley is still the chief breadstuff of the Lowland peasantry. Even throughout the Highlands, where only very favored spots can grow it, it is the favorite crop.

## OATS.

Scotland lives mostly on oatmeal porridge. Oats form probably two thirds of the Scotch grain crop. In Scotland it almost invariably forms the first crop after clover or pasture, when wheat in that country does not prosper. In England it forms not more than one sixth of the grain crop.

## BEANS.

Beans are cultivated to a considerable extent in Scotland and in the midland counties of England, exclusively as cattle food. Even the stalk is used in Scotland as fodder.

## THE CORN HARVEST.

Thus the harvesting of the grain crops is styled in Great Britain. The reaping

mense for its age, and though full of bloom every year, that is all it does for me. I've never seen a plum on it as big as an ordinary pea. Such are the pleasures of raising fruits. Oh, from the half-dozen peach trees I picked about one basket and a half, summer before last; last summer, some four baskets; but many rotted, being so continuously wet; and this spring the frost nipped the bloom, and half the trees are on the decline.

I'll forgo speaking of the florists, or rather the luck, or had luck, I've had with them. Suffice it to say, they are not among the most reliable men in their representations, or at least, I can't, with the greatest care, prove them to be such. Let one instance suffice. I paid twenty cents for a paper of white violet (pansy) seed, of "great beauty and fragrance." I nursed the plants some sixteen months, and had a very poor common, purple violet. The manettia vine won't bloom, neither will Solanum jasminoides. And still I am cultivating flowers!

A. L.

Pennsylvania.

## A GOOD HOG-GATE.

Mr. L. D. Retty sends a description of a good hog-gate which he has in use. The construction of the gate is fully explained by the illustration.

DOINGS OF DEPARTMENT OF AGRICULTURE  
AND THE EXPERIMENT STATIONS.

BY JOSEPH.

THE GRAIN APHIS.—Secretary Rusk has just sent out the first report for 1890 of the United States Department of Agriculture. As usual with these documents, there is a great deal of matter to wade through for which the average farmer has no understanding, or which is of no practical interest to him. I believe that these reports are by far too lengthy, and treat on too many matters not especially interesting or instructive to common people. There may be good suggestions or new truths contained in them, but such are hidden among the 600 pages which few people will read all through. It seems that the government might save money by sending out a condensed, popular edition, in popular language, to average farmers, and supply the full, voluminous report only to colleges, experiment stations, and to those individuals who have a more scientific turn of mind. The good things now hidden in a large volume might thus be made available to the general public.

In the present report the entomologist gives us a chapter on the grain louse and its natural enemies, with illustrations, colored and otherwise. This insect, which looks very much like any other common plant louse, has been the cause of much complaint among grain growers this season, and done considerable damage in many sections. The insect usually appears in early spring, multiplies rapidly, especially if the season is free from extremes, and at last disappears towards harvest time, when its natural enemies get the upper hand of it. In some seasons, however, and for reasons only suspected, these parasitic enemies of the louse fail to come in sufficient numbers to clear out the destructive grain pest, and in such a case the crops—wheat, oats, barley, etc.—sometimes suffer serious injury.

Of course, there are insecticides which, if brought in contact with the lice, would speedily kill them, as they do other plant lice. Among them we have, foremost, the kerosene emulsion, and tobacco tea. But as these remedies cannot be applied in a practical and economical way to the broad acres of grain, we cannot build great hopes on them for the protection of our grain crops. And since we know of no other means of destroying the intruders, we must leave them to the tender mercies of their insect parasites, and perhaps of occasional heavy rain storms, and try to find comfort in the fact that it is only once in twenty or thirty years that those parasites are unable to get the better of the grain louse at the approach of the warmer season.

USEFUL BIRDS.—The department ornithologist reports to have found a few species of birds besides the rose-breasted grosbeak that occasionally eat potato bugs. Among these is the yellow-billed cuckoo, already known as a valuable friend of the

farmer because of its habit of feeding upon caterpillars, both smooth and hairy. With the grosbeak, the habit of eating potato bugs proves to be fairly constant; but unfortunately, the bird does not seem to be very abundant anywhere, and hence the resulting benefits have not been generally noticed. The marsh hawk is given due justice in the life history contained in the ornithologist's report. It is unquestionably one of the most beneficial, as it is one of our most abundant, hawks, and its presence and increase should be encouraged in every way possible, not only by protecting it by law, but by disseminating a knowledge of the benefits it confers. Although it occasionally carries off poultry and game birds, its economic value as a destroyer of mammal pests is so great that its slight irregularities should be pardoned. Unfortunately, however, the farmer and sportsman shoot it down at sight, regardless or ignorant of the fact that it preserves an immense quantity of grain, thousands of fruit trees and innumerable nests of game birds by destroying the vermin which eat the grain, girdle the trees and devour the eggs and young of the birds. The marsh hawk is probably the most active and determined foe of meadow mice and ground squirrels, destroying greater numbers of these pests than any other species, and this fact alone should entitle it to protection, even if it destroyed no other injurious animals.

Another bird which the report mentions as greatly beneficial is the common screech owl. No species except the burrowing owl is so destructive to noxious insects as this; grasshoppers, crickets and a number of night-flying beetles are devoured with relish. The stomachs of two young birds which had recently left the nest were found distended with May beetles. It also destroys a large number of field mice. Let us protect these, our friends.

**FERTILIZER TESTS.**—The Tennessee station people also report on tests made with various fertilizers on oats, in plats of one twentieth acre each, and on clover in plats of one half acre each. The two striking features concerning the oat tests, as reported by the station, are: "1. That two plats fertilized with potash gave the highest yields, and the average of three plats (plats 3, 6, 12) is higher than the next highest yield from other forms of fertilizers. 2. The plats giving the smallest yields received no manure, and the average yield of the three plats not manured is smaller than the yield of any other plat of the nine, with one exception, plat 5."

There are, however, other striking features about the results not commented upon in the bulletin. The inference from these results must be that the soil used for these tests was lacking in available potash, and that consequently the application of potash, either as muriate or in kainite, gave the best results. But it is strange to note that the application of nitrate of soda alone in one case, and that of acid phosphate alone in two cases, without potash, gave nearly as good results; while a combination of the three essential plant foods—in nitrate of soda, acid phosphate and kainite, but all in small quantities—gave next to no increase of crop. Did the nitrate of soda and acid phosphate, where either was applied alone, be effective only in so far as it unlocked the stores of potash where held in insoluble compounds in the soil? If not, how can we reconcile these seemingly contradictory results?

The other striking feature not commented upon is this: That the increase of crop was in no case sufficient to pay for the fertilizer used. This, to me, is a sad fact, and only confirms what I have often pointed out, that the production of our ordinary cereal crops, where the raw materials have to be furnished in purchased fertilizers, is far from being a safe financial operation. Of course, the soil was poor, and probably destitute of carbonaceous matter.

The tests of fertilizers on clover were also unsatisfactory. It is worthy of special note, says the bulletin, that up to the time of cutting the crop, no visible external effects of the fertilizers on the clover were to be seen.

The tabulated results are also interesting, as indicating how uncertain plat experiments may be. In no case did the in-

crease of yield pay for the fertilizer. It seems to me, however, that the age of the clover, third year, had much to do with making the results so uncertain and even contradictory. In my own experience I have never seen a case where the application of complete manures, or even of single elements of plant food, where needed in the soil, had not in due season shown themselves externally, and always plainly and prominently.

#### WHEAT YIELDS AT THE OHIO AGRICULTURAL EXPERIMENT STATION.

The following table gives the principal results of a comparison of varieties of wheat made this season on the farm of the Ohio Agricultural Experiment Station, the complete report of which will be published in an early bulletin of the station.

The test was made on a piece of bottom land, about seven acres in area and very uniform in quality. It was in clover in 1889, and was plowed for wheat after removal of the seed crop of clover.

Nearly all the varieties were more or less affected with smut; the relative injury from which is indicated in the last column of the table.

All the varieties suffered more or less from the winter killing during the severe freeze of March. In the next to the last column of the table is given the per cent of injury from this source, as estimated about April 1st.

Each plot was exactly one tenth acre in size. The yield is given in bushels per acre.

Plot No.	VARIETY.	Yield Per Acre. Bushels.	Per Cent Wheat Killed.	Per Cent Smutted.
1	Wyandot	34.70	20	2
2	Velvet Chaff	31.50	20	2
3	Farquhar	29.45	18	10
4	McQuay	33.58	22	10
5	Mediterranean	29.38	25	1
6	Sibley's New Golden	28.53	42	0
7	Tasmanian Red	29.29	35	1
8	Gypsy	29.50	25	2
9	Democrat	30.41	22	0
10	Deitz	31.93	25	1
11	Reliable	36.16	25	2
12	Valley	36.16	30	1
13	Egyptian	34.00	25	1
14	Patagonian Trigo	17.50	85	2
15	Red Fultz	32.50	33	2
16	Poole	29.66	35	2
17	Michigan Amber	31.08	33	2
18	Vitter	24.16	45	1
19	German Emperor	30.06	30	2
20	Hungarian	23.33	12	15
21	Geneva	26.29	12	2
22	Nigger	31.75	12	1
23	Diehl-Mediterranean	27.50	30	1
24	Miller's Prolific	23.00	7	1
25	Golden Cross	30.00	49	1
26	Missouri Blue Stem	32.16	35	2
27	Seneca Chief	31.01	35	1
28	Velvet Chaff	35.25	15	0
29	Sheriff	27.91	15	2
30	Big English	27.91	17	2
31	Tuscan Island	25.28	12	1
32	Surprise	29.33	12	0
33	Royal Australian	32.66	10	0
34	Golden Prolific	32.75	15	5
35	Red Brazilian	32.33	35	0
36	Red Russian	19.41	85	1
37	Finley	36.00	25	1
38	Fultz	34.20	25	0
39	Hicks	34.66	3	1
40	Rocky Mountain	27.58	22	0
41	High Grade	29.12	22	0
42	Ontario Wonder	25.08	5	10
43	Currell's Prolific	31.83	10	1
44	Mealy	31.08	8	3
45	Improved Rye	27.45	50	0
46	Extra Early Onkley	25.54	60	2
47	Silver Chaff	29.58	10	1
48	Martin's Amber	29.12	10	0
49	New Monarch	21.66	17	25
50	Theiss	25.41	12	0
51	Oregon	26.62	17	0

Of the above-named sorts, Sibley's New Golden and Tasmanian Red appear to be identical with Mediterranean. Reliable, Valley and Egyptian resemble each other very closely while growing, but show slight differences in the grain. Red Fultz and German Emperor seem to be simply new names for the old Michigan Amber.

Poole resembles these closely, but is slightly earlier, has a shorter straw and a more drooping head. Hungarian and Geneva cannot be distinguished in the field; the one, however, is very smutty, the other not so. Diehl-Mediterranean, Golden Cross, Missouri Blue Stem and Seneca Chief are also identical. We also have the same wheat under the names of "Raub's Black Prolific," "Michigan Bronze," "Brady Lake" and "Andrew's No. 4." Royal Australian is simply the old Clawson. Finley is another name for Fultz. We also have Fultz under numerous other aliases in our complete general list of wheats, which comprises about 250 so-called varieties.

The tests of fertilizers on clover were also unsatisfactory. It is worthy of special note, says the bulletin, that up to the time of cutting the crop, no visible external effects of the fertilizers on the clover were to be seen. The tabulated results are also interesting, as indicating how uncertain plat experiments may be. In no case did the in-

#### MATHEMATICAL PRINCIPLES IN FARMING.

In spite of education, precept and example, there is a frightful amount of want of application of the most simple mathematical principles in all branches of industrial production, but more especially in farming. Some time ago I wrote to FARM AND FIRESIDE how I missed it when I began gardening in planting everything in squares or blocks, and how I was trying to remedy it by getting everything into long rows. My attention is again drawn to the subject by watching the different operations of plowing and mowing as I go to market day after day with berries. One man has a twenty-acre field in grass. Instead of mowing around it until it was done, mowing wide or narrow according to quantity wanted down at once, he cut it crossways in pieces of four acres at

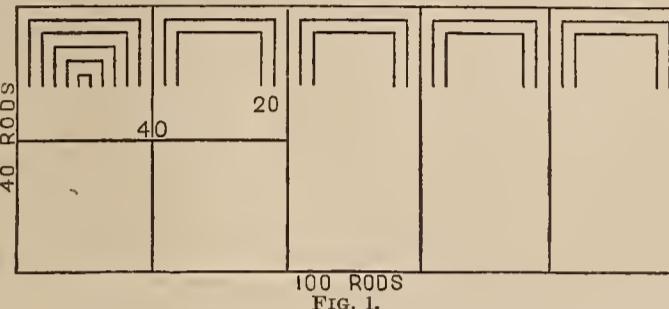


FIG. 1.

once. The field was one hundred rods long and forty rods wide. Supposing he cut five swaths to the rod, he turned four hundred corners in cutting four acres, and two thousand in cutting the whole. Had he cut around the entire piece he would have turned only eight hundred corners altogether, or only two fifths as many.

Now, every farmer knows that it is in turning where the time is lost, and not only is time lost but the team is more or less headstrong as they near the end, swerving often from a true line and leaving belts or not cutting the entire width of mower or plow. In mowing this piece in five pieces it took as long to mow the first piece as it did the last, but had he mowed around the whole he would have turned but sixteen times around to mow the first acre, and even the last piece in the middle would have required less turning, because his finishing swath would have been sixty rods long. In long work it is comparatively easy to get the full width of cut from a mower, while it is quite otherwise in short work with frequent turning. In this case there was an added loss in coming out to the fence every time four acres was first gone around, and a large amount of backing and "gee-hawing" that could have been dispensed with had the whole field been gone around. In this matter it makes no difference in the ratio whether the width of cut be wide or narrow. Had the mower cut a rod at four times along, it would have taken three hundred and twenty turns to cut each section, or one thousand six hundred for the twenty acres. The same machine would have made but two fifths as many, or six hundred and forty corners in cutting around the entire piece until done. I wondered the man did not cut around a few times to give a clear headway, but he did not, yet he was a clever young man, full of the idea that he could give his father and other old farmers points in farming and show them how to make money. Fig. 1, as a whole, gives in

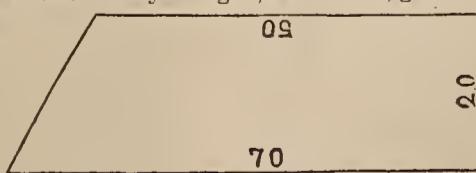


FIG. 2.

partial outline the facts in this case in another form, whereby the dullest reader can see that the points I have made are correct.

The portion in the upper, left-hand corner divided off and containing five acres forty rods long by twenty rods wide, shows how another man mowed it by cutting it in two equal pieces. Very little study will show that in this case the mower, the tedder and the rake were turned around twice as many corners as if it had been mowed in one piece.

The same man has a piece in corn and potatoes of the shape and dimensions of Fig. 2. He first plowed it in two pieces

and then planted it the short way in drills. Allowing five rows to the rod, he has three hundred and fifty rows, the shortest one being but three feet long. This necessitates turning seven hundred times to cultivate it once over twice in a row. Had he planted it the long way there would have been but one hundred rows, and the shortest one would have been fifty rods in length.

L. B. PIERCE.

#### HANDLING BROOM CORN.

To harvest broom corn, the cutting should begin as early as the milk begins to form in the seed. To table, begin by breaking or bending the stalks of the first hill, from two to three feet from the ground, letting the tops fall on the ground; bend two rows at a time. Break the second hill the same height from the ground, letting the tops fall on the stump of the first hill, then the third across the second, and so on through the field, forming a table of two rows from the stalks.

Let two men or boys follow, cutting the tops, leaving the stalks from two to four inches long on the longest brush, and on the short brush the stalk should be from six to eight inches in length.

I bought a crop of ten tons last year, that would have been worth one hundred dollars more had the stalks been left longer on the short brush.

To free the brush from the blades when cutting, take hold of the brush part only, and pull the stalk up against the knife, and as soon as the knife cuts through the stalk, the springing back of the stalk takes the blade with it.

When there is a brush not fully out of the pod, take the brush in one hand, the blade in the other, give a quick, parting motion, and the brush will leave the blades and stalk at the first joint. The brush should not lie on the stalks or table longer than one day.

Begin cleaning off the seed the second day, and place on slats, under cover, to dry or cure. When cleaned of seed, two thirds less space or shed room is required to cure the brush, and it is much less liable to heat. It may be laid on the slats, from twelve to fourteen inches deep, and when thoroughly dry, should be taken from the slats, and piled in tiers from two to three feet high, to allow of a sweat before making up into bales. During the process and time of curing, the light should be excluded as much as possible, to insure a good color.

Care in cleaning and in every particular will insure the best price. Often I find a man's crop damaged from one fourth to one half its value by carelessness in harvesting.

O. H. P. OLDS.

#### SILAGE AND ROOTS.

It has been claimed that the general use of the silo will drive root growing out of farm practice. This seems plausible enough to those who view the subject at long range; but it will not do with practical men who grew and fed roots before they knew the virtues of silage. The writer interviewed a number of such men last week, and on every one of their farms a significant fact was noticed; close beside the field of ensilage corn was a field of roots. The two crops grew together like brothers—they were in no sense rivals or competitors. In localities where roots can be grown with profit—where the climatic conditions are perfect—they have a perfect right to stand beside the silo. They are to be fed between the first frost and the opening of the silo.—*Rural New-Yorker*.

## Get The Best

Is a good motto to follow in buying a medicine, as well as in everything else. By the universal satisfaction it has given, and by the many remarkable cures it has accomplished, Hood's Sarsaparilla has proven itself unequalled for building up and strengthening the system, and for all diseases arising from, or promoted by, impure blood. Do not experiment with any unheard of or untried article which you are told is "as good as Hood's," but be sure to get only

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Sold by all druggists. \$1; six for \$5. Prepared only by C. L. HOOD & CO., Lowell, Mass.

100 Doses One Dollar

## Our Farm.

## NOTES FROM THE HOME GARDEN.

BY JOSEPH.

**S**eed RAISING.—One of our friends, Charles Wilson, of Oregon, asks me a ticklish question. He wants to know what kind of vegetable seeds do not mix. He plants every year fifty or sixty varieties of corn, beans, peas, turnips, radishes, lettuce, cucumbers, melons, tomatoes, etc., and like many other people, would be glad to save his own seed in order to be sure of its being fresh and reliable, if he can save it without danger of getting a bad mixture.

Well, I doubt whether I can name him a single vegetable that would be entirely safe from getting mixed when two or more varieties are planted near one another. The very fact that few of the seeds we purchase of seed growers and seed dealers (and they usually take considerable pains to have them pure) are entirely free from admixtures, proves that the prevention of crosses and hybrids in vegetables is a difficult matter. Not only this, but most kinds have a tendency to sport, or to revert to the original form, making it necessary that strict watch be kept for the purpose of the prompt removal of all specimens among a lot intended for seed, which do not come strictly true to the variety. To be absolutely sure of getting pure seed of any variety of vegetables, no other should be grown on the place, nor in the near vicinity, and no plant of the variety should be left that shows the least variation from the type in any respect. On the whole, therefore, I feel safer to depend on the skill and good-will of a conscientious seedsman than on my own efforts or ability to keep the seed pure.

Corn varieties mix readily at considerable distance, and the variety planted in the direction of the prevailing winds, or at the foot of a hill, is apt to suffer most. Peas, beans, turnips, cabbages, melons, cucumbers, squashes, etc., also produce crosses quite readily. All such, to be kept pure, should be planted at quite a distance from other varieties of the same species. Lima beans, however, rarely mix with other beans, and if but one sort of Limas is planted on the place, they may be safely used for seed with the expectation of keeping the variety pure. Varieties of the same vegetable, which bloom at different seasons, can also be planted together without danger of mixing. If you plant Cory and Stowell's Evergreen sweet corn side by side, they will give you pure seed if no other variety, blooming with the one or the other of these, is growing in the vicinity.

Hybrids are not produced as easily as crosses. The former, you know, are produced by members of different species, the latter only by different varieties. I have never seen a case of melons mixing with cucumbers, or either of them with squashes or pumpkins, on my grounds, although I have planted them together, or in closest proximity, year after year. Consequently, if I have but one variety of melons, or cucumbers, or the like, I do not fear to gather and plant the seed of such, no matter how many varieties of other vines are growing close by. I have, for instance, a patch of Emerald Gem muskmelon, Volga watermelon, Long Green cucumber and Summer Crook-neck squash, all growing close together, often muskmelon and watermelon in the same hill, and I intend to save seed from all of these varieties for planting next season. I am quite sure all will come true.

Otherwise, and with the exception of tomatoes and peppers, I hardly ever care to save seeds of common varieties. I can get them as cheap as need be from my seedsman. But when it comes to high-priced sorts, the case is different. You may be sure I save every seed of the new, bush Limas—Burpee's and the Kumerle—also of choice peas and some other things. The Burpee's—an excellent thing, by the way—I have all by itself. I also gather my own seed of pole Limas, although I grow a number of varieties together. If

they get mixed, all right, since I only grow them for home use; and as I gather the earliest and best pods, I'd just as soon have them get mixed as much as they desire.

Now, as to tomatoes, I am always sure to gather seed of the earliest and best, and I run the risk of mixing. No seedsman could afford to give me seed as carefully selected as I select it, even at \$10 an ounce. People who grow tomato seed for market have to make use of the bulk of the crop in order to make the business pay. My practice for years has been to select a few of the very earliest and very finest specimens of each variety, mash them into a bowl, let stand to ferment for two or three days, and then wash out, strain, dry, and put in paper bags carefully labeled, with date of gathering, etc. By planting seed thus grown, year after year, the strain is all the time improved. Prof. L. H. Bailey (Cornell University) says the life of a tomato variety is only about ten years, and it then becomes useless. My tomatoes do not run out like this. Usually, the varieties as offered by seedsman are in general cultivation only that length of time, or less, but this is merely owing to the fact that the seed is grown promiscuously, and new sorts, evolved by selection and propagated with greater care, are all the time being introduced, and take the place of others which cheap seed growing has allowed to run out.

**TRANSPLANTING RHUBARB.**—To do its best, rhubarb, or pie-plant, must be divided and reset every few years. This can be done in fall or spring; if in fall, wait until the leaves begin to die, then take up the plants, divide the roots so that you have straight pieces with a good crown to each, and reset in very rich and well-prepared soil four feet apart each way. Apply a good lot of compost later on, and you will be sure of some good stalks next season. The operation can be done with fully as good success in early spring. Plenty of good manure is the essential requisite of success. If you take the plants up in the fall, it may be well to store a few in soil in the cellar, or some other cool place, and have them ready for starting up in hotbed or greenhouse for earliest use. Thus it comes very handy for pie material in early spring, especially when apples are scarce, as they will be next season.

## Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

## THE IDEAL STRAWBERRY.

BY JOSEPH.

Not only instructive and interesting, but amusing, as well, is the following paragraph found in the catalogue of a western nurseryman, B. F. Smith:

"The ideal strawberry—where does it flourish, and what is it? In Barnesville, Ohio, the Sharpless is the ideal berry. There it makes more money for the grower than any other sort. It also grows larger than any other known variety. Four quarts gathered there the last season contained, respectively, eleven, thirteen, fourteen and sixteen berries. Up in Janesville, Wisconsin, the Jessie is the ideal. There its size and product are astonishingly large, yielding two hundred bushels per acre. Further north, in the same state, at Green Bay, J. M. Smith, a noted berry grower, says the old Wilson's Albany is his best, and that he has never found its equal for large product and profit. The ideal in southern Illinois is now the Warfield, which is supposed to be a seedling of the Wilson, and is said to equal the Crescent in productiveness. It has to be tested in and for Kansas. Two friends in Missouri wrote us recently that the best croppers and money makers last year were Mt. Vernon and Manchester. So it is expected that our Missouri friends will be booming the Mt. Vernon and Manchester as their ideal strawberries. In New Jersey, the ideal strawberry is the latest novelty introduced by some popular nurseryman, no matter how inferior the fruit may be."

I have been looking for the ideal strawberry for many years. Sometimes, when reading the enthusiastic description given to a new berry by its introducer, and perhaps the unqualified endorsements of horticultural papers and writers, I thought

I was going to get hold of my ideal. Thus it was with the Monarch of the West, the Great American, the Sharpless, the James Vick, the Jewel, the Crimson Cluster, the Jessie and a host of others. In every case I found out that the descriptions, like the pictures, had been terribly overdrawn, and the early endorsements were based on advertising patronage, or given by people who relied more on the truthfulness of the introducer than on what they knew about the novelty.

In short, the ideal strawberry has not yet been found. We have some good berries for special purposes. The Sharpless, the Wilson, the Jessie, the Manchester, the Bubach, etc., are all good for both home use and market, over a larger or smaller extent of territory, each one being a favorite in certain sections. But each one, also, has its faults, and none succeeds everywhere and under all conditions of climate and soil. The Haverland is immensely productive here, and has other points in its favor, but it is too light colored and too soft for an ideal berry. The Warfield, also, has qualities which exclude it from that distinction. So we will have to continue our search for the ideal strawberry; and it will be well to provide ourselves with a good deal of skepticism concerning the value of any novelty offered under that claim, no matter how positively its perfection is proclaimed by people who push its sale.

## NEW VARIETIES OF FRUITS.

In the course of an informal talk before the American Nurserymen's Association, Pomologist Van Deman, of the United States Department of Agriculture, said he thought too little attention was being paid to our native fruits from which much that is of value may be secured. Many good plums have come from *Prunus Americana*. The Hawkeye from Iowa is the best among the newer sorts. Others are Rollingstone, Leduc, Cheney, Ludlow, Hopp. Clyman is a variety of *Prunus domestica*. All these are very promising. He also spoke of the Burbank, which was originated by the horticulturist and nurseryman of that name in California. It has not yet been grown outside of its native state. It is of medium size, crimson purple, of fine quality and will probably prove hardy in the middle states. There seems to be much confusion in the nomenclature of some of the Japanese plums. Three distinct varieties of Kelsey were reported. An objectionable feature of the Japanese plums is that they bloom so early that their blossoms are very apt to be injured by late frosts; they are fully as bad as the apricot in this respect. Satsuma is a round plum with deep red flesh and a small stone; it succeeds well at the North, as does also Ogon.

Among new apples were mentioned Garfield, a handsome apple of bright crimson stripes on a yellow ground. This and Lincoln seem to be hardy in northern Illinois. Shirk, from Indiana, is sweet and high colored; an excellent autumn sweet apple, and hangs well on the tree. Peifer is a seedling of Pewaukee, but is harder than its parent. Lacon is promising and is probably sufficiently hardy for the North-west. Ivanhoe is a long keeper but of very inferior quality. Pullman is evidently the Red Canada under another name. The Windsor, from Wisconsin, is of good quality and medium size.

But few grapes were noticed. The Lyon, from Michigan and named after the distinguished pomologist, was said to be a vigorous grower, with fruit of fine quality. Colerain is larger in both bunch and berry than Martha. Mr. Campbell said it is a Labrusca, and that the quality is good. Woodruff Red is a very vigorous grower and exceedingly productive. A very profitable market sort but devoid of fine quality. Green Mountain is a good grower, productive and early; promising.

Mr. Van Deman spoke encouragingly of nut culture and thought there was a great future for it. He considered Paragon the best chestnut, all things considered, and he believes our native chestnuts to be superior to any of the European or Asiatic varieties. The Paragon shows no indication of foreign blood; it bears abundantly at an early age, but is not of as fine quality as some of the native sorts. Numbo is

very large, but is a foreign variety and of poor quality.

The Crandall currant is a good thing. It is very large, a variety of the Missouri currant, and is not subject to the attacks of the currant-worm.

Mr. Van Deman also gave some information regarding the work done by the department in the introduction of

## TROPICAL FRUITS.

The lemons that have been heretofore grown in this country have been unsatisfactory from the bitterness of their skins, but now, varieties having sweet rinds have been introduced and are being successfully grown in many parts of Florida and California.

The citron now used in this country is all imported from foreign countries, chiefly from the Mediterranean regions, but it can be successfully grown in some parts of southern California and Florida. Budded trees of the best foreign varieties have therefore been introduced, and it is expected that we shall soon be able to grow all the citron needed. Choice varieties of cocoanuts have been introduced along the sea coast in the extreme south of Florida. Also choice varieties of mangoes have been obtained from the East Indies and planted in Florida.

Mr. J. H. Hale addressed the meeting on

## GROWING PEACHES

At the North. His home is in central Connecticut, and he planted his peach trees from Tennessee pits, on the high lands and steep ridges of the surrounding hills. He gave thorough cultivation and applied no other manure than commercial fertilizers, potash and bone dust chiefly. The trees are pruned severely and the fruit thoroughly thinned. In harvesting, the peaches are sorted and carefully graded. His crop last year amounted to 17,000 baskets, which brought \$25,000 for the entire crop.—*Orchard and Garden*.

## INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

**Summer Care of Strawberries.**—P. F. L. Kirkwood, Dakota, writes: "Please tell us how to manage the strawberry bed now to get plenty of berries next year."

**REPLY:**—It is generally best to plant a strawberry bed each year, and only let the bed bear one year. If the bed is in very good condition after picking the berries, it may be weeded, thinned out and manured, and will then probably bear another good crop; but as a general thing it is not profitable to work out old beds. In thinning out the old bed, be sure to take out the old plants and leave the young ones. Strawberry plants may be set in August and September, but require much care.

**Raspberry Varieties.**—W. H. C. White Rock, Ill. The Sonhegan is a very early, productive, black cap raspberry, well worthy of planting. The Gregg is larger, but later than the Souhegan, and very desirable. Schaffer's Colossal is purplish in color, and very prolific, but not generally so salable a berry as the black raspberries; but on account of its productiveness it is largely planted and considered profitable for the near market. The Nemaha, also, is a valuable black cap variety which is giving great satisfaction wherever used. They may be bought of any good nurseryman, and will not cost over \$1 per hundred, and are sent by express.

**Green Sawdust for Strawberry Mulch.**—G. R., Madera, Ohio. Green wood sawdust makes a good mulch for protection against freezing and thawing, but it does not protect the berries entirely against being injured by spattering, for the sawdust itself gets onto the berries during heavy rains. Chips from a planing mill are better on account of being coarser. If sawdust is used, it should never be applied more than one inch deep. Mulch should never be put on a strawberry bed before hard freezing weather. The land should be cultivated frequently during the fall and summer months, when, even if the weather is very dry, such cultivation is much better than mulching, a covering of three inches of loose soil being the best kind of mulch. And then again, mulching is more easily applied when the ground is frozen hard enough to bear up a horse and wagon.

**Beetles for Name.**—F. J. K., Davenport, Iowa. The package in which you sent the insects was broken open en route, and arrived empty. I think the beetles were probably the *Fedra ruficollis*, which is a dark colored beetle about half an inch long, or a little less. It appeared in Minnesota very abundantly in July, which was about the time your vines were injured. It eats away the green portion of the leaves. On varieties without down on the undersides of the leaf (as the Clinton), it eats clean-cut, irregular holes, while on leaves like those of the Concord, with down on the underside, it eats away the tissues, but does not eat through the downy covering. Its ravages only last a short time, but when abundant, it is a great nuisance. It may be destroyed by laying sheets under the vines and then jarring them, when the beetles will curl up and fall off, something like the curculio. But a better way is to kill them by spraying the foliage with Paris green and water at the rate of 100 gallons of water to one pound of the poison.

## CORRESPONDENCE

**ROME BEAUTY APPLE.**—The first tree originated in my grandfather's nursery (the late Israel Putnam), on the Muskingum river, five miles above Marietta, Washington county, Ohio. It was removed to Rome township, Lawrence county, Ohio, and planted there with other stock from the same nursery; hence the name, Rome Beauty. It was about the year 1820.

H. C. PUTNAM.

EXTRACTS  
FROM CORRESPONDENCE.

FROM KANSAS.—I beg to demur from S. B. L.'s letter classing prohibition as one of the curses of Kansas. I will venture to say he is not an American farmer with a family of boys growing up. Kansas is one of the grandest states in the American union to raise that best and noblest of all crops, a family of boys and girls to manhood and womanhood, without being ruined by that greatest of all curses. There are thousands of families moving to Kansas on account of her prohibitory laws, where they can raise up their children without the risk of having the saloons get hold of them.

Pittsfield, Mass. L. E. R.

FROM KENTUCKY.—Metcalf county is in the central portion of the state. The eastern portion of the county is in the foothills of the Cumberland mountains. The land is generally rough, but produces fairly good crops of corn, wheat, oats and tobacco. We suffered very much for the want of rain this summer. The western and northern half of the county lays well and produces good crops of wheat, oats, corn and tobacco. The tobacco crop is a failure this year, and the corn crop will be light on account of the long drought. The apple crop is the poorest we have had for many years, and there are but few peaches. The blackberry crop was the finest I ever saw.

W. I. W.

FROM WISCONSIN.—St. Croix is an agricultural county. Last year it produced 442,892 bushels of potatoes and 649,939 pounds of gilded butter. It is also a manufacturing county, there being eighteen saw-mills, ten flouring mills, one furniture factory, one broom factory and three extensive factories for wagon material. There are two starch factories which have a capacity of thirty-five hundred bushels of potatoes daily. Unimproved land in the timber is worth from six to ten dollars per acre; improved farms on the prairie, from ten to thirty dollars per acre. There are two iron ore mines in successful operation. The shops are situated at the county-seat.

O. P. Hudson, Wis.

FROM KANSAS.—Independence is the county-seat of Montgomery. Our wheat averaged about thirteen bushels, and flax about eight bushels to the acre. Corn is about half a crop. The oats crop was good. Castor beans look well, and cotton is doing well. I have five acres of fine cotton. I also have six acres of tomatoes and six acres of sweet corn for the canning factory. The drought has hurt everything but my cotton; it stands the hot, dry weather. Our apples are all falling off; our peaches are no good, the grape crop is good; early potatoes were good and sell at from thirty to fifty cents a bushel. Late potatoes will be scarce. The hay crop will be short. The Farmers' Alliance is strong through here, and nominated a people's ticket.

Independence, Kan. T. F. K.

FROM MINNESOTA.—This is a good country for the home seeker. The soil is a sandy loam and produces abundantly all kinds of vegetables and small grain. Good crops of corn are raised without fertilizers. All kinds of small fruits, such as blackberries, raspberries, strawberries and gooseberries, do well. Blueberries, cranberries, grapes and plums grow wild in great profusion. This is a timbered country, but fire has thinned it out greatly. Land can be bought for five dollars an acre. A few miles north there is still government land left. We are about thirty-five miles north of St. Paul and Minneapolis, on the St. Paul & Duluth railroad. A great part of the land is owned by speculators, and it affords an extensive range for stock free. This will eventually be a rich country.

S. E. G.

Wyoming, Minn.

FROM KANSAS.—Early corn is almost a complete failure on account of the dry weather. Late corn is coming on finely, and the prospect is good, although the dry weather will materially reduce the yield per acre. Wheat and oats were harvested in fine condition, and the yield was large. The late rains have done an immense amount of good. Farmers generally belong to the Alliance. Let us see from the statistics if prohibition is a curse: Kansas had a total population of 996,096 when prohibition came, and 917 in her penitentiary. After nine years of prohibition and an increase in her population of 600,000, she has 373 convicts in her penitentiary. Kansas is second in the Union in her miles of railroads, main and side tracks. I could go on and give the increase in valuation of assessed property, etc., but I have given enough to prove that prohibition is a blessing, and not a curse.

North Topeka, Kan. T. W. S.

FROM UTAH.—Everything is looking very prosperous in Juab county for the farmers. The crops are generally good—the prospect was never better. Wheat will go from 30 to 40 bushels, and barley from 55 to 75 bushels per acre. The first crop of lucerne was extra heavy. Peaches, plums and apricots are a failure this year. Apple crop is very heavy, but falling from the trees. I must not for-

get to mention the potatoes. I believe that we shall have a heavy crop, and those that have been dug for present use have been very fine. The second crop of lucerne is just fit to cut. We may expect three good crops this season. The weather is very hot this summer. The thermometer for the last twelve days has varied but little. At 8 A. M., 75°; at noon, 115° in the sun, and in the shade, about 100°. We had peas this season about June 1st, something like one month sooner than I ever had them before.

J. B. D.

Nephi City, Utah.

FROM INDIANA.—Our products are corn, wheat and kindred crops usually grown in this latitude. The wheat crop was a failure. The corn crop promised to be very large, but it will prove a failure unless it rains soon. The farmers are using natural gas, and chopping and hauling wood will soon go into history as what they used to do in older times. In my vicinity there are several companies. Some parties pay twenty dollars per year for gas, while others get it for fifteen dollars. In other localities wells are dug on the cooperative plan. Land sells for from forty to one hundred dollars per acre. But little is changing hands. We are twenty miles from the capital of the state, and, of course, the prices get larger as one gets nearer the city. This would be no place for a man with little money. There are a great many conveniences, but they cost money. Farms rent for half of crops, renter paying all expenses. There are exceptions, but owners generally are seeking to rent for cash, and in a few years it will be difficult to rent under any other arrangement.

W. W. J.

Fortville, Ind.

FROM OKLAHOMA.—The drought which extended over most of the country this summer has been worse here than can be remembered by the very first cow-boys and other early settlers of this region. In spite of the drought, the corn in the bottoms still looks dark green, and will yield from 40 to 70 bushels per acre, while even the upland sod-corn withstood the

drought remarkably well. Our cotton fields are exceedingly promising and a joy to behold. Most of the fruit trees planted here last spring are thriving. Only a few murders and other crimes were committed here since the settlement of Oklahoma, which speaks well for the population, considering that we were for more than a year without an organized government. The proverbial rude, cow-boy lingo is being fast supplanted by proper language and behavior. The adjoining Indian reservations that have been purchased and are being bought by the government, contain several million acres of good farmland land, excepting the western parts of the Cherokee strip and the Cheyenne and Arapahoe reservations, which, however, contain rich mineral deposits and good grazing lands. The southeastern portion of the "strip," the Sac and the Fox and the Iowa reserves are the best agricultural and pastoral lands of all to be opened between now and next spring. The nearest way by railway to this region is via the Santa Fe, to Wharton or Orlando, where the home-seeker can reach Stillwater and Ingalls at reasonable rates; and in a short time. Those coming by wagon are advised to come to Pawnee Agency, it being from there to this point only about fifteen miles. The Sac and Fox line is four miles from here; the Pawnee reserve is five miles; the Iowa line is about eight miles, just across the Cimarron, while the "strip" is only four miles from Ingalls.

Ingalls, Oklahoma.

M. D.

vegetables, do well here when properly cared for. The principal crops are cotton and corn. A great many other crops can be raised with profit, but the people have got into the habit of raising cotton and cannot quit it. Those that raise nearly everything that they eat, are doing well, while those that raise all cotton and depend on buying everything, are running behind. Potatoes, both sweet and Irish, do well here. Wheat and oats would do well if attended to. Sorghum and peanuts also do well. Nearly all kinds of produce bring good prices on account of nothing much being attended to except cotton. The bottom lands here produce the best crops. The upland crops will be light this year if it continues dry. Poultry raising would be a profitable business here. There is plenty of free range for stock, and stock of nearly all kinds is very cheap.

E. F.

Sheridan, Ark.

## THE QUESTION ANSWERED.

The question has been asked by many, Why cannot my pumping wind-mill be made in some way to do more than pump the water? for much of the time a great deal of work could be done if the power could only be utilized. This has set many to experimenting and the result is that there are several machines made to be run by a wind-mill, but the most ingenious device that we have seen is the simple but perfect little machine called the BES Converter, manufactured by Messrs. Shoudy & Miller, Rockford, Ill. To this converter is attached a grinder, so that all the grain can be ground for the stock. The result is obtained in the following manner: A triple rack is attached to the pumping rod of the wind-mill by a simple fastening, so that it can be easily thrown in and out of gear. In the rack is a set of double reversible gears, receiving and changing the up-and-down motion of the wind-mill to a rotary motion which runs the grinder, or is transmitted by chain or leather belt to other machinery from the wheel which is on the upper shaft. All further information will be gladly sent you by sending a postal to the above firm.

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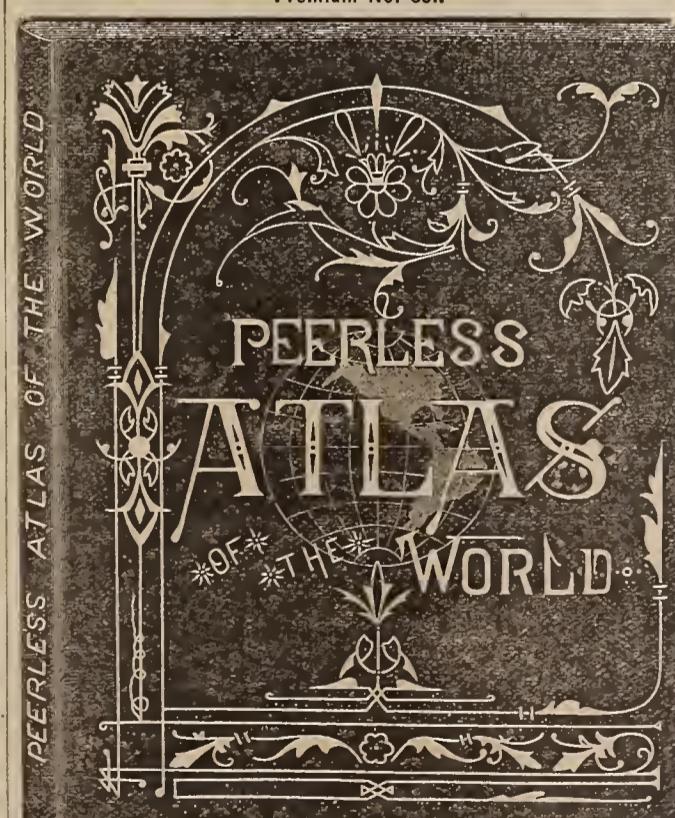
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## Our Fireside.

## ALONE.

Sad are blue eyes to-night,  
And I know why;  
Storm rages with its might.  
Blue eyes could cry.  
Some one they're waiting for,—  
One who is dear—  
Blue eyes look t'ward the door  
Dimmed by a tear.

Snow flying wild about,  
Keeps him away;  
Rosy lips mustn't pout,  
He has to stay.  
Sweet blue eyes, for thy sake,  
If it could be,  
He'd change to a snow-flake,  
And fly to thee.

## How Jerry Sold the Farm.

MAUDE MEREDITH.



MY HANDS are a little stiff from washing, but then the wash is all out the line, out there in the sunshine, the floor cleau, with faint suspicions of its recent washing back in the yellow corners, the stove shines, and the tea-kettle is singing. May be it is because of the enjoyment

the tea-kettle seems to take in its wordless song that I feel like talking, too. Perhaps it is only the "contrariness" of human nature that I want to talk at this particular moment, when there isn't a soul within miles of me to talk to. Even the dog lies asleep on the sunny porch, and the cat jeopardizes her back hair, dozing under the oven. Anyway, I want to tell someone how we happened to come West, and—listen:

Jerry had some money left him by his aunt, with which he had bought a farm on the day he was twenty-one. His father gave him a cow, and his older brother three sheep, his mother a dozen hens, and his sister a pet kitten. He had bought with the idea that a lot of cheap land was better than a little at a higher price, and when he had purchased an old horse and a few farm tools, he hadn't a cent left; so "the boys" clubbed together and rolled him up a log house, 16 by 20, and he built an out chimney of stone and blue clay. He made a straw "huuk," put up a few shelves for a pantry, took an old cook-stove, and went to keeping house.

I was eighteen then, and had been teaching school for a year. For the next four years we each worked in our separate ways, but at the end of that time he begged so hard for a house-keeper, and really looked so sorrowful and cadaverous from living on soda biscuits and bacon, that I consented to end our long engagement by giving up my school to take bread and brew coffee for Jerry.

Well, the farm was enormous, for us, and poor. There were acres and acres of pasture land half covered with rocks and brambles; sugar trees enough to have made a fortune, but awfully scattered and inaccessible; ranges for sheep, if only he had the sheep for the ranges; wood land, so far away as to leave no profit to cut the wood; timber, but in such "ungetatable" places as to make cutting unprofitable; little mowing land, and little under cultivation.

Poor Jerry had cut and rolled and burned "slashes" until he was almost worn out. He had sowed wheat and oats and raked it in by hand. He had cut his patches of grain with a sickle, and had dug his potatoes from between the stumps and roots. To be sure, he had his farm, and it was improving every day under his hard work, but all his labor was at a disadvantage.

I had known this all along, but I did not take in the full sense of it so vividly until one day during the first summer of our married life, when Jerry got me out to help load hay. This does not sound just right, but really, the meadow was so rough and uneven, and haying on it so slow, that he could not afford to hire much help, so I learned how to load; and as I had very little to do inside that rough, log house, I didn't at all mind it. But this day the load upset. I went down among the stumps, and the load turned over me. Luckily, a stump caught the weight of the hay, but there I was and there I had to stay until he could get the horse loose from the shafts, hitch her onto the side of the wagon, pull it up, and then pitch away some of the hay. As the thermometer would have stood in the nineties,

had it lain under that load of hay with me, you can imagine what kind of a smothered, sticky, hay-seedy kind of a time I had. I did quite a little meditating, as well as waiting, while Jerry dug me out.

I said nothing at the time, but when we sat around the kitchen stove on one particularly stormy night, the following winter, I suggested to Jerry that I believed it would be wise to go West and take up a homestead.

He scouted the idea at first, but I wrote to my home paper, asking for information regarding western land, and little by little we picked up ideas about the land of prairies. The result was, before spring Jerry said he would sell out if he could get what he had put into the place.

"If we had a good house on it," he said, shaking his head, as much as to say, "but you see, we haven't."

It was early spring when he came to that conclusion, and one of the first sunny days I went out into the road and looked at the surroundings. On a slight rise of ground sat the log house, with a few stumps for ornament. Through a rough gate, over a stony driveway, we reached one end of the house, the drive straggling off in a crooked way to a log barn, thatched shed and pig-pen beyond.

"Now, I could make boxes and fill them with geraniums that could sit on two of those largest stumps, if Jerry would grub up the remaining three or four that do not stand in good positions," I said to myself, walking slowly up and down. "And as to this old, patchy fence, since there is nothing in the yard save stumps for the cattle to eat, and no cattle ever come this way to eat them, why not pull it down?"

I hunched my shoulders a little, for the wind blew down cold from the mountains, and I looked up toward their snowy domes. Somehow I saw the warm green of the fir trees at their feet first, then the darkening purple of the more distant points, and the masses of

the tea-kettle seems to take in its wordless song that I feel like talking, too. Perhaps it is only the "contrariness" of human nature that I want to talk at this particular moment, when there isn't a soul within miles of me to talk to. Even the dog lies asleep on the sunny porch, and the cat jeopardizes her back hair, dozing under the oven. Anyway, I want to tell someone how we happened to come West, and—listen:

Jerry had some money left him by his aunt, with which he had bought a farm on the day he was twenty-one. His father gave him a cow, and his older brother three sheep, his mother a dozen hens, and his sister a pet kitten. He had bought with the idea that a lot of cheap land was better than a little at a higher price, and when he had purchased an old horse and a few farm tools, he hadn't a cent left; so "the boys" clubbed together and rolled him up a log house, 16 by 20, and he built an out chimney of stone and blue clay. He made a straw "huuk," put up a few shelves for a pantry, took an old cook-stove, and went to keeping house.

I was eighteen then, and had been teaching school for a year. For the next four years we each worked in our separate ways, but at the end of that time he begged so hard for a house-keeper, and really looked so sorrowful and cadaverous from living on soda biscuits and bacon, that I consented to end our long engagement by giving up my school to take bread and brew coffee for Jerry.

Well, the farm was enormous, for us, and poor. There were acres and acres of pasture land half covered with rocks and brambles; sugar trees enough to have made a fortune, but awfully scattered and inaccessible; ranges for sheep, if only he had the sheep for the ranges; wood land, so far away as to leave no profit to cut the wood; timber, but in such "ungetatable" places as to make cutting unprofitable; little mowing land, and little under cultivation.

Poor Jerry had cut and rolled and burned "slashes" until he was almost worn out. He had sowed wheat and oats and raked it in by hand. He had cut his patches of grain with a sickle, and had dug his potatoes from between the stumps and roots. To be sure, he had his farm, and it was improving every day under his hard work, but all his labor was at a disadvantage.

I had known this all along, but I did not take in the full sense of it so vividly until one day during the first summer of our married life, when Jerry got me out to help load hay. This does not sound just right, but really, the meadow was so rough and uneven, and haying on it so slow, that he could not afford to hire much help, so I learned how to load; and as I had very little to do inside that rough, log house, I didn't at all mind it. But this day the load upset. I went down among the stumps, and the load turned over me. Luckily, a stump caught the weight of the hay, but there I was and there I had to stay until he could get the horse loose from the shafts, hitch her onto the side of the wagon, pull it up, and then pitch away some of the hay. As the thermometer would have stood in the nineties,

the barn, and my boxes were made. As we had no planed boards or paint, I tacked white birch bark on the outside and nailed them to the two stumps that stood in the best position.

Then we brought a pine and two or three arbor-vites for the front yard, a mountain ash, a straight, trim sugar maple, a blossoming dogwood, a shrub called mulberry, having immense, fuzzy leaves and a blossom almost like a wild rose. From the house gardens we brought roses and lilacs, and in lieu of snowballs we set thrifty elder shrubs. There was also another shrub called "Jersey tea," bearing the loveliest soft, green foliage, that I dragged home and gave a place.

There was a tree, lovely in spring time, with its crown of white bloom, that we called a "haw," a very pretty tree, and we transplanted one of large, symmetrical proportions. Then we fairly scoured the woods for woodbine (*A. Americana*) to plant about the house. This so filled the yard that the stumps were rather picturesque than objectionable, so we made rustic vases for each; it was prettier, and certainly a much quicker way than digging them out.

Had we been late about the work, it would not have been so satisfactory, but not a tree or shrub died, and with the help of a generous supply of morning glories, flowering beans and clumps of sunflowers, we had a genuinely picturesque little nest by the middle of August. The best of it all was, we had done it all ourselves, with Dobbin's help in hauling, and we had not paid out a penny.

In my flower beds and borders, marigolds, larkspurs and four-o'clocks hobnobbed together and made it seem like one blaze of color, and the vines completely covered the house clear to the eaves.

We told a few people that we thought of going West, and they all protested, "Oh, don't you hate to go away off out there and leave your pretty place?" they cried. I demurely said I did, but I would take lots of flower seed with me.

And then Jack, Jerry's chum, decided that he, too, must get married; but he had no home, and—well, it sounds like egotism to say so, but somehow he didn't exactly know how to go about making one as we had; said he



color put a thought into my head. Why not bury the rough logs of the house in greenery, hide the ugly barns, and make the place beautiful, instead of the barren, stumpy patch, just like the homes of our neighbors?

I rushed in and disclosed my plan to Jerry, who sat polishing his first ox-bow with a bit of glass.

"We can make the place so pretty that it will sell, I know we can," I cried, and he sprang up, twirling the finished bow about his head, as he shouted:

"You're a trump, Polly; it will make the place more like a home, whether it sells or not."

Out we went, hitching Dobbin to the stone-boat, and away we tramped to a near-by hemlock thicket. We dug and trimmed and loaded, and before night we had one side of our hedge outlining a prettily curved driveway that ran from the road up past the corner of the house and on toward the barn.

It was too early for transplanting such trees, we knew, but we carefully took up a large ball of dirt on the roots of each, and they were soon in the ground again. The trees were all about ten feet in height, and we snipped them even and shapely.

Before the week was out the old fence and gate were gone, the driveway hedged on both sides, a tall, white pine and two balsams hid

never could make one look as cosy as ours and he used to come over Sunday mornings and pace up and down that curved driveway between the rows of fragrant hemlocks. At last he said:

"If you ever do decide to go West won't you sell the place to me?"

Jerry said if we ever left it he hoped Jack might have it, and added something about the happiness that he was certain would go with it. No matter just what all he said (young husbands will sometimes gush, you know), and he asked Jack what he would be willing to give for it.

Jack named a figure that surprised us both, and by the next night the papers were made out, and money to bind the trade paid down.

That winter Jack was married, and Jerry and I came "out West." This was some years ago, when "Uncle Sam" still had lots of land to give away, and he gave us a generous slice. We do not have to rake in wheat with a hand rake among the stumps, but the very first thing we did, after our house and barn were built, was to send away for trees, and made another driveway very much like the one in the old home.

We found more oak and less variety of other trees growing wild here, yet with a good span of horses, and eyes always open for pretty trees to carry home, we picked up a good

many, and others we sent for. We have not the usual square of Lombardy poplars for a windbreak around our yard, but we have grounds that every one declares beautiful, and we find this arrangement of trees quite as effectual a windbreak as rows of cottonwood or poplar.

But Jerry declares that he would have spent all his days on the rough farm among the hills had I not fixed up the place so that it found a ready purchaser, and he always adds, "Polly Hopkins, you're a trump." Of course, he don't mean it; he only means that my love of the beautiful in the trees and shrubs growing all around us enabled him to turn his rocky pastures into gold. I, too, love the new home, but I would like to get some of the mulberries and witchapple of New England to adorn it.

## THE REST CURE.

Drugs must go. Even the most conservative people are coming to the conclusion that drugs do not cure. If one has not fully given up the fallacy of dosing, let him stop and consider what gives us health. Surely it is not bad air and bad food, nor can it be any nauseous compound. What sound body could withstand the drugs given to the poor, sick creatures that fill our land, asks the *St. Louis Magazine*. It would sicken a well person; then surely it would not reclaim the sick. To get well, one should have the most favorable surroundings, perfect rest for the body, mind and nerves; keep quiet and take plenty of sleep, and stop eating for one, two or even three days, and you will be surprised to see how quickly kind nature will come to your relief. One may learn how rapidly repose cures by observing the simple movements of a cat. When indisposed from whatever cause, you cannot tempt puss with the freshest new milk even; she finds a quiet, clean, warm place, curls herself up and gently sleeps it off.

If we do not sleep well we do not live well. People have many theories about sleep. Many who ought to know better advise a hearty meal before going to bed. We think the process of digestion should be well under way before retiring. Quiet, pleasant exercise, such as a slow walk or a rocking-chair on the open porch, or, better still, an hour's drive, conduces wonderfully to refreshing sleep. Late snappers, especially of highly seasoned foods, with wine, beer or champagne, are really dangerous experiments, and bring on a condition of unrest interspersed with horrid dreams and nightmare, that is only one remove from apoplexy. Of course, if one is very hungry and not tired by overwork or muscular exertion, a moderately healthful meal and even a full meal may be digested and not materially interfere with sleep; but as a rule, three to five hours should elapse between eating and sleeping. By observing this plan a restful, refreshing night is passed, and one gets up with a feeling of vigorous, recuperated strength, and a sharp, appreciative appetite for breakfast that gives strength and vitality of the best sort for the activities of the day.

In this day of fast living and hurry of business our nerves give out. We go to the doctor for a remedy. He gives us stimulants; for if he gives anything it is a stimulant. "The nerves need strengthening," he says. Yes, we know that, and long for something soothing and restful, but when one looks over the storehouse of drugs we do not find anything that will give the desired effect. It is not there. There are remedies, however, that seem to serve the purpose, but the relief gained is at the expense of our vitality.

If you will turn to kind nature and observe her simple laws, how quickly the tired nerves will be quieted. Absolute rest. How few understand in what that consists. If they keep quiet they think they must eat often, and thus foil the object they were seeking as a remedy. A tired stomach can never give strength to tired nerves, but give that organ long intervals of rest between meals, give it time to relieve the overloaded veins and carry off the effete matter that has clogged the system, and the terrible nervous, flying-to-pieces sensation we are in such dread of will soon disappear.

## THE SALVATION ARMY.

"Think of the doctors, now dead and gone, who have knit their brows over the sick." Yes, and think too, of the patients, the chronic cases, the "given over" ones, those over whom the brows were knit in vain. The chronic diseases exhaust the resources of the physician and the strength of the sufferer, who, given over as a hopeless case, has only to wait for death, the physician being able only to palliate his sufferings, or give temporary relief. The impression is becoming general, however, that there is a remedy for many of these chronic and "hopeless" cases, and that it is the Compound Oxygen Treatment of DRs. STARKEY & PALEN. But read for yourself what the Compound Oxygen Treatment has accomplished in chronic cases and the testimonials from patients given over by physicians. Read what Judge Kelley, Mrs. Livermore, and numerous others, have said about it. You will find it in our brochure, sent free, 200 pages, a Treatise on Compound Oxygen. It will give you records of many, very many cases and cures, with testimonials. Of course, there are worthless imitations, either under the same or different names, but all alike claiming to possess the properties of Compound Oxygen. None genuine but that manufactured by DRs. STARKEY & PALEN, 1529 Arch St., Philadelphia, Pa., or 120 Sutter St., San Francisco, Cal.

## LEAKS ON THE FARM.

The leaks in the roofs of the farm buildings are not all that many farmers have to contend with. We see many farmers buying high-priced implements, and when through with them for the season leaving them where last used, either in furrow or in the stubblefield, until wanted the next spring, and then losing valuable time in going to the shop for repairs, or, what is worse, going to the store for new ones. Have a place or shelter for every machine, and when the hired help or owner himself is through using, put it in the place assigned for it. Some will say that takes time. To be sure it does; but is it not better to have tools that are fit to use at any time than it is to stop the team when busy to go to town to get them fixed and thereby cause a leak in the pocket-book?

Again, many will keep scrub stock and breed from year after year because the owners of blooded stock ask too high a price for the service of their stock. Then, you may see, on riding through the country, dilapidated buildings, and the owner will say he is not able to repair them, but on inquiry you will find that he will spend enough money for whiskey and tobacco to keep them in good repair.

Another leak is the hiring of cheap help, mere eye servants, and leaving them to the work, while the proprietor is in town talking politics or sitting on the fence discussing neighborhood gossip with some one as shiftless as himself.

These are but a few of the leaks that might be mentioned, for pages might be filled in enumerating the things, both small and great, that keep the farmer plodding along, always in debt and eternally growling about hard times.—*Western Plowman*.

## MRS. MORTON'S PARIS GOWNS.

It is easy to tell why Mrs. Morton need give up thought to her costumes, as M. Worth is their composer. There is a seductive tale afloat that she has twenty that have never been taken from their wrappings, ten for carriage and day wear and ten regal reception robes. It is said the bill Worth rendered was \$20,000, as he selected, planned, and made every one of them. \$1,000 per gown distances all competition in modest Washington, and Mrs. Morton will be the best dressed as well as the handsomest woman in the administration.

She is not a bit afraid of colors, and in many of her costumes she even touches on the startling shades of red and daffodil yellow. She can do this because her arms and throat are like snow, her face has a soft tinge of pink at night, her eyes are dark, and her hair of an iron-gray color, all of which features will suffer any color in dress. Mrs. Morton has a liking for furs, especially seals and otter, and the two are introduced into her evening as well as her day costumes. One of Mrs. Morton's opera cloaks is raved over as a sweet thing. It is of white broadcloth, very long, lined with rose pink, slashed up the back, and fairly imbedded in crinkly Angora fur.

## BEER DRINKING.

In appearance the beer drinker may be the picture of health, but in reality he is most incapable of resisting disease. A slight injury, a severe cold, or a shock to the body or mind, will commonly provoke acute disease, ending fatally. Compared with other inebriates who use different kinds of alcohol, he is more incurable and more generally diseased. It is our observation that beer drinking in this country produces the very lowest kind of inebriety, closely allied to criminal insanity. The most dangerous ruffians in our large cities are beer drinkers. Intellectually, a stupor amounting almost to paralysis arrests the reason, changing all the higher faculties into a mere animation, sensual, selfish, sluggish, varied only with paroxysms of anger, senseless and brutal.—*Scientific American*.

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## LEGAL CONTRACTS.

Don't make a contract on Sunday.  
Don't make a contract with a man who is under the influence of liquor.  
Don't refuse a contract made on Sunday if it was ratified on a week day.  
Don't qualify your acceptance of a contract unless you mean to make a new proposition.  
Don't refuse a contract because no time is specified for its performance.  
Don't charge interest on account for goods sold until the credit given has expired.  
Don't fail to ask for interest in an action for default on contract to pay money.  
Don't tender a sum due on a contract unless the exact amount is in current funds.  
Don't attempt to revoke or nullify a contract under seal except by an instrument executed under seal.

Don't try to enforce a contract against a man's estate unless he bound his legal representatives.

Don't try to put a forced construction upon a contract; look for the intent of the parties.

Don't think that compound interest will render a contract usurious.

Don't think that a usurious note or contract may be freed from its taint by simply executing a new one of like tenor.

Don't fail in executing a new contract in place of one tainted with fraud, usury, etc., specifically to repudiate the blemish.

Don't forget that there is an implied warranty in selling goods by sample.—*Lawyer Lockwood*.

## A NARROW VIEW OF IT.

Occasionally, one has a glimpse into a peculiar phase of feminine character. A group of prominent women were discussing a noted business woman who, by dint of tremendous will force and great perseverance, has surmounted obstacles at which the ordinary woman would turn faint.

"A remarkable woman," said one, "she deserves her success."

"What a brilliant conversationalist!" said another. "I love to hear her talk."

"Her generosity is unbounded," said a third.

"Do you not admire her?"

The woman to whom this question was addressed tossed her head and contemptuously replied:

"I do not know her. She powders, and as I make it a rule never to speak to a woman who does that, I have no opportunity for observing these remarkable traits over which you seem so enthusiastic."

A silence fell. Then one, bolder than the rest, said:

"That is the woman of it. Fancy a man refusing to know a brilliant, genial, successful man because he waxed his mustache!"

## SOME OF THEM WEAR THE DUDE BAND.

About the acme of absurdity which may be reached by women who imitate the fashions of men was shown in the costume of a woman on Broadway the other afternoon. She was tall, thin and thirty, and her clothes were built upon the plans of a man's evening dress. Her skirt was of a black stuff, drawn rather tightly and hanging in such an adept arrangement of folds as to make it necessary for one to look twice in order to become convinced that she was really not wearing trousers. She had on a low-cut waistcoat of fine, white duck, with four buttons, and fashioned just like a man's dress waistcoat. Her shirt was of fine, white linen, open in front, with two studs. It was topped with a standing collar, and she wore a regulation, small lawn tie. The coat was in accord, being of the same black material as her trouser-skirts, and cut with the shawl collar and swallow-tail back once the exclusive privilege of men. The woman's hat was a flat-brimmed, black straw, and she swung an umbrella so tightly wrapped that it looked like a cane.—*N. Y. Sun*.

## WOMEN SMARTER THAN MEN.

Not long since the writer went into the office of a man who has a school of typewriters. That is, he instructs men and women to operate typewriters and assists them in getting work. I asked him for the result of his observations. He replied:

"Women learn quicker than men. They are more in demand than men. They give better satisfaction, as a rule, I mean, than men. And there is another thing I want to tell you," he said. "A few years ago, when women first began learning how to operate the typewriter and began getting work, a cry went up among men about cheap female labor. In the last twelve months I have known of a number of cases in which men have not only offered to do this work for less than women, but have undertaken to get the places by means that were not creditable. I am not a woman's rights man by any means, but it is my observation that the woman of to-day who is put on her mettle surpasses her brother."

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How shall I tell you? She has so many. As for her sponsors, how could they know In naming that baby, their worships may be, Entitled of women a score or so? When I see her where flowers are blooming, Another blossom so fresh and sweet, I can compare her to nothing fairer; I call her my "Daisy," my "Marguerite."

When I see her with hands so busy, A rustic maiden in homespun dressed, A household fairy, with step so airy, Homely "Maggie" describes her best. When she greets me with mirth and laughter, "Meg," I think, is the sweetest name. Of roguish Woffington she reminds me; Then she is "Peg," my merry dame.

Ah, there are hours of gloom and sadness, When earth is sown with cold, gray rain, When hearts are weary and life so dreary, One scarce dare hope for the sun again. Then she comes with her mien so gentle. Calm, serene 'mid a mad world's whirl. Of jewels the rarest, the purest, fairest, I know why they named her "Margaret," "Pearl."

Changeable lady! What sprite hath lent you This magic power that we see you wield? Now tears, now smiling, now fond bequiling, None can oppose you, for all must yield. But stop! One name that I mean to give you Will fetter and bind you all your life. You need not guess it; I will confess it: My love, my lady, I'll call you "Wife."

*—Harper's Weekly.*

## HOME TOPICS.

**S**QUEAKING SHOES.—It is a great annoyance, not only to the wearer, but to every one in the house, to have a pair of squeaking shoes. To remedy the evil, take an awl and bore three or four small holes between the toe and instep just deep enough to reach through the first layer of the sole; fill each hole with oil, and repeat as long as the oil is absorbed. This plan is better than painting the sole with oil, as the oil is sooner absorbed. The holes quickly fill up, and do not injure the shoe in the least.

A BED-REST.—Any one who has been ill, and tried to sit up in bed, will appreciate this contrivance. Take a piece of bed-ticking as long as the bed is wide, and about a yard and a quarter wide. Hem it, and sew a large ring stoutly into each corner. Have four stout hooks and screw two of them into the back of the head of the bed, and two on the inside of the side pieces, so that when the rings are hooked over them the ticking will be at the proper angle to support the invalid in a comfortable position. This is easily adjusted, and a great improvement in every way over the old way of piling pillows, comforts, etc., behind one.

SCHOOL-BAGS.—A very convenient article for a school-girl or boy to carry their books to and from school in can be made in a few minutes. Take a yard of twilled flannel (dark green is a good color), double it lengthwise, sew up the ends and side, leaving an opening twelve inches long in the side seam; turn the edges of the opening down and cross-stitch around it. Two rings are put on to keep the contents in place. These may be found at any notion store. Sometimes the two rings are fastened together with a little chain, which is an improvement. If you have time, embroider initials on the end. This bag is better than a strap, as it protects the books, and better than the single bag, as it may be carried over the shoulder if part of the books are put in either end of it. Use the single-width flannel.

CHILDREN'S VISITORS.—During the summer vacation is a good time to make the acquaintance of our children's schoolmates and friends. We may know all the children of the neighborhood by sight, and, in fact, feel quite well acquainted with them, but if we have never had an opportunity to watch them at their play, and to talk with them, we do not know whether they are just the children we would choose for companions for our little ones. I know it is some trouble to entertain our children's company, but it is trouble that pays. It pays to make children happy, and it is always a pleasure to them to entertain their little friends in their own home, and to have mamma

make them welcome and give them some little treat. Nothing makes them happier than to have their little friends think that their mamma is "nice." We may be sure something is wrong when our children prefer to go away rather than have company come to them. A little guidance and a few suggestions will usually keep all going smoothly. If you find some children are persistently rude and ill-behaved, see that they are not invited again; and if they come without invitation, as they sometimes do, I should not hesitate to send them home, if I was satisfied that their influence would be bad on my own children. Do this as pleasantly as possible, but do not run the risk of having all your teachings turned to naught by unfit associates.

MAIDA McL.

## VARIETY IN SERVING VEGETABLES.

Vegetables being one of the chief resources of the country housewife, who is remote from city markets, it is necessary that they be served with variety, not to tire the family with sameness in preparing them, and it is really surprising how many excellent dishes may be served from the products of the kitchen garden. As many cooks are wedded to their old-fashioned modes of cooking, we suggest a trial of the following new modes of preparing fall vegetables:

**STUFFED CABBAGE.**—Take a firm head of cabbage, pour over boiling water, let stand fifteen minutes, drain, scald and let stand half an hour, then drain and shake until dry. Make stuffing of two tablespoonfuls of rice, a tablespoonful of chopped onion, a tablespoonful of chopped parsley, half a pound of sausage mixed well together. Open the cabbage to the center, put in half a teaspoonful of the mixture, fold over two or three of the small leaves, cover with a layer of the mixture, fold over more leaves, and continue until each layer is stuffed. Press all firmly together, tie in a piece of cloth, put in a kettle of salted, boiling water and boil an hour and a half. When done, remove carefully the cloth, put the cabbage in a deep dish, and serve with cream sauce.

**CABBAGE A LA FLAMONDE.**—Take off the outer leaves of a hard head of cabbage, and cut in quarters; scald, drain and chop fine. Put in a stew-pan with a tablespoonful of butter, one chopped onion, half a dozen cloves, a teaspoonful of salt and half a pod of red pepper. Cook slowly for one hour; take up, pour over half a teacup of melted butter, and serve.

**FRIED SWEET POTATOES.**—Skin and slice lengthwise cold, boiled sweet potatoes. Put three tablespoonfuls of butter in a large frying-pan, dust the potatoes with a little salt and pepper, throw in the pan, brown, and turn first on one side and then on the other. Serve very hot.

**ESCALLOPED SWEET POTATOES.**—Cut cold, boiled sweet potatoes in thin slices. Put a layer in the bottom of a large baking-dish, cover with sugar and butter, then another layer of potatoes, butter and sugar until the pan is full; put the butter and sugar on top, and set in the stove until brown.

**SWEET POTATOES WITH SAUCE.**—Bake sweet potatoes, let cool, and slice thin. To every pint of potatoes allow two tablespoonfuls of butter, a teaspoonful of chopped onion, half a pint of soup stock, with a little salt and pepper. Put the butter in a frying-pan; when hot, throw in the potatoes and onion, fry and stir until brown; then take out with a skimmer and set to keep warm. Add flour to the butter to thicken, mix in the pan until smooth, thin with the stock, stir until it boils, season with salt and pepper; take from the fire, add the yolk of a beaten egg, pour over the potatoes, and serve.

**PARSNIP FRITTERS.**—Boil four large parsnips, after washing and scraping; when done, drain and mash fine; add half a teaspoonful of salt, a tablespoonful of flour, a well-beaten egg and a pinch of black pepper; mix well and form in little cakes. Put a large spoonful of fat in a frying-pan, and when hot, fry the cakes brown.

**OKRA AND TOMATOES.**—Cut a quart of well-grown okra in thin slices. Peel three large tomatoes and slice. Put in a saucepan together, season with salt and pepper

and let simmer for half an hour; add a tablespoonful of butter, and serve.

**TOMATOES AND MUSHROOMS.**—Toast some slices of bread, cut them into circles, and butter them. Peel some firm, ripe tomatoes, cut them in thick slices and lay them on the toast. On the top of each lay a peeled mushroom. Put them on a dish, pour over a little melted butter, set them in the oven for two or three minutes, and baste well. Serve very hot.

**STUFFED CUCUMBERS.**—Cut large-sized, ripe cucumbers into slices, peel and remove the seeds, scald the slices for ten minutes, plunge in cold water and drain them. Line a baking-dish with thin slices of bacon; make chicken force meat, fill the centers of the rings, wrap each in a thin slice of bacon, tie with a string, lay in the dish, pour over a pint of stock and set in the oven to bake for twenty minutes. When done, take up, remove the bacon, drain the slices, lay in a dish and serve with brown sauce.

ELIZA R. PARKER.

## THE JAPANESE MANNER OF COOKING RICE.

Every one who has been in the East knows how beautifully the rice is served, thoroughly cooked, yet the grains remaining separate and distinct and not in a sodden mass, as is too often the case at home. The following recipe for cooking rice has been given by a skillful Japanese cook.

It will be well to state that the Japanese rice-pot is used only for cooking rice; its peculiarity consists in a heavy, wooden cover, which rests by its weight on the rim of the pot, so as to fit snugly and yet allow the steam to force its way under it. The rice is first washed thoroughly in cold water, rubbing hard with the hand till all milkiness passes off and the water runs clear. It should then stand all night in water, the amount is indifferent. Next morning, as much water, in which the rice has soaked all night, as there is rice to boil, is put into the pot on a quick, even, wood fire, and when boiling hard the rice is added, and after stirring, the cover is put on and must never be taken off till the rice is dished. As soon as the water begins to boil again, it puffs out freely from under the wooden cover, but when the water is nearly boiled away only faint suggestions of steam come out (the time occupied is from three to four minutes, according as the rice is old or new; the old rice is better, being drier and takes the shorter time); the fire must then be taken immediately from under the pot or the rice will burn, but the pot is left on the furnace or range for fifteen minutes to swell evenly; after which the pot is taken off the range and left to stand ten minutes more in a cool place; the rice can then be emptied from the pot without sticking to the sides or bottom. It must not stand more than ten minutes, or the rice will become soggy. When served, the lid is removed for the first time, and the rice will be found to be standing up, whereas, if the lid has been lifted during the cooking, the rice will be sunken.

Since all these particulars cannot be easily followed in a foreign kitchen, it is well to note the three essentials: 1. The rice must be thoroughly washed, rubbing it hard, in several waters before boiling. 2. The amount of water used in boiling the rice is the same, by measure, as the amount of rice to be boiled—pint for pint, or cup for cup. (It will be found almost impossible to cook a very small quantity of rice in this way.) 3. When once the lid has been put on the pot, after stirring the rice into the boiling water, it must not be removed till it is ready to be served. If any American housewife is appalled by these minute directions, let her comfort herself by reflecting that to a Japanese matron, bread making appears just as bothersome, if not more so.—Rev. E. R. Miller.

## HOW TO BLEACH MUSLIN.

Now comes the bleaching time. The fields are green; there is a warm sun, and a soft wind blowing, and everything is propitious. Housekeepers who have nice, unbleached muslin, or yellow, stained table linen, will do well to try this recipe:

Put one pound of chloride of lime into eight quarts of warm water. Stir with a stick for a few minutes, then strain through a bag of coarse muslin. Work the bag

with the hand to dissolve thoroughly, then add to it five bucketfuls of warm water, stir well, and put in the muslin. Let it remain in one hour, turning frequently, that all may be wet. Take it out, and wash well in two waters, to remove the lime; then rinse and dry. This quantity will bleach twenty-five yards. The muslin will bleach more evenly and better if first wet and dried.

## HINTS.

A Florida paper suggests that oranges should be sold by weight. It is a good suggestion. Good oranges, packed with juice, are always heavy, and ought to command a better price than light-weight, dry ones.

The French have a way of keeping melons which it may be worth while to remember. The fruit is cut with a long stem, which is coiled up and then buried under brown sugar to keep it from drying up by exposure to the air.

A paragraph in the *New England Farmer* points out that a tablespoonful of kerosene added to the soap and water with which floors are washed will greatly help in making them clean, and will leave the paint fresh and bright. There will also be a considerable saving of soap.

**DELICIOUS MARSHMALLOWS.**—Dissolve one pound of clean, white gum-arabic in one quart of water; strain, add one pound of refined sugar, and place over the fire. Stir continually until the sugar is dissolved and the mixture has become of the consistency of honey. Next, add gradually the beaten whites of eight eggs; stir the mixture all the time until it loses its thickness and does not adhere to the fingers. Flavor with vanilla or rose; pour into a tin slightly dusted with powdered starch, and when cool, divide into squares with a sharp knife. Of course, a smaller amount may be made by using half the ingredients named, but this recipe is none too large for us, says the writer in the *Cottage Hearth*.

**TO CUT WARM BREAD.**—Without having it moist and heavy, use a thin, sharp knife and dip it into boiling water. Wipe quickly and cut the bread as fast as possible. Lay a napkin on the bread-plate, and place the slices on it; the napkin will absorb the moisture.

**DUSTERS.**—Canton flannel wall dusters, or broom dusters, are a great convenience when one wishes to dust the walls. To make them, unbleached canton flannel, unbleached knitting cotton and a little fast-colored, coarse embroidery cotton will be required. Make plain bags as wide as the broom, and deep enough to just about half cover it, and finish at the tops with plain hems; then with the knitting cotton crochet an edge directly into the hem. On the outside work some design—a spider's web is pretty—in coarse outline or chain stitch with the red, blue or brown cotton, the object being to produce, not fine work, but a showy effect. Fast-colored yarn is as good or better than embroidery cotton, and more rapidly worked. Sometimes the crochet work is also in colored yarn to match, but unless one is very sure that it will endure washing and boiling, the unbleached is better.

**COVER FOR A SAND-BAG.**—A pretty cover for a sand-bag—which, when heated, is preferable to the sometimes treacherous rubber water-bags—is made of cream-white linen toweling, soft and thick; it is a plain case, a little larger than the bag, open at one end, where the front and back are both rounded off to form short flaps, which are folded over the other and held in place by a button and button-hole. On the front side the following suggestive lines are worked in outline stitch with coarse, red marking cotton:

I bring thee hot sands,  
Hot sands from the shore,  
All golden and glowing,  
So shiver no more.

Should the case be a small one, the inscription might be only:

I bring thee hot sands,  
So shiver no more.

The cases are sometimes made of pretty-colored flannel, embroidered with silk, but the toweling or soft canvas or denim is better, for they may be washed without injury.

## TALKS TO THE JENNIES.

BY MRS. RICKETS' DAUGHTER.

**S**o you are worried about entertaining Lizzie Brayton, because she comes from the city, eh? Well, now, don't fuss till you are tired. If Lizzie is as nice as her mother and aunts, your extra work will be unnecessary. Your ways will please her, no doubt. Her people are simple in their tastes and are easily made glad. They are all workers, too, though not of the same kind as your folks. Better have a neighbor girl to help you those two weeks; she can do all the washing of dishes, churning and heavy work, which will leave you leisure to be with your guest. Lizzie can show you how to make pretty things, while you, in return, can teach her something in your line. The longer I live the more I see the nonsense of worrying. Be sure and have your little brothers and sisters sit down always with the company. They are well-bred children and it will help them to learn pretty ways.

To quote the words of our immortal Lincoln, "That reminds me of a little story." I was at cousin Margaret Simpson's for tea, last week. She had invited the new minister and his wife, the professor, druggist and their wives. The meal was nice and good. Brown bread, white biscuit, delicious yellow butter, golden honey and canned fruits that had all the glory of October canned with them, dainty slices of pink and white ham, home-made ice cream and cake; the table was beautiful with china, damask and flowers. She seemed a little worried and flushed, and her eyes were unusually bright and sparkling. I noticed this and was sorry for her, as I always am to see a tired hostess overanxious and not at ease. Cousin is a fine woman and is trying to bring up her children in the way in which they should go. That's why she lets them eat when there are guests at the board. The four little dears sat in a row and evidently enjoyed the "spread." They were ranged at one end of the table, where the grandfather could wait on them. Their white heads were smoothly combed, and their great, woudering, blue eyes looked lovingly into his aged face. As I looked at them, that sentence from the Bible came to me: "Children's children are old men's crowns."

The tea passed off pleasantly and all enjoyed it until there was a pause, and right here, little four-year-old Grover "let the cat out of the bag." He said to the preacher: "I like to have you come to our house, I wish you'd come every day." "Thank you, my little man," said the rector, "why do you like to have me come? Is it because I love little boys and like to tell them pretty stories?" "Yes, it's a little bit that and more, too," he said, grinning and showing his little, white milk-teeth. "I like to have you come to we dit to drink out of the doblets and eat off the dishes with posies on 'em."

It was funny, had Margaret and Will not been so mortified. The rector's wife was a mother and understood the situation, and immediately began telling a wonderful story of mission work in the far West, and drew the attention of the company. I relate this, not because I enjoy gossip, but I do like to see the love of the beautiful which is in each child's heart ministered unto. Dear baby Grover! When no company was there he drank his milk from a common, yellow mug, minus a handle; his dinner napkin was the remains of a muslin shirt-tail!

How a child loves pretty dishes and sparkling glassware and silver that is bright. The average family cannot afford to use real china every day, especially where there are small children, as it would not last long. Let it be used often enough to accustom the little ones to it, then they will not be too communicative about it before company. If you would have your little brothers and sisters love the pure and exquisite, let them be brought in daily contact with it. This can be done and no pride fostered and no bad principle strengthened.

I used to visit in a family, once, where the father, a good, intelligent man, had a bad habit of eating with a peculiar noise. His daughters had hinted to him, and Annie Louise one time was rude enough

to reprimand him right before a tableful of friends. I was angry at this little upstart for her unfilial conduct. She said sharply: "I have often said, father, that if you didn't quit that crunching sound it would be a mortification to you. A person would think you were an anaconda in the jungles of Africa crunching the bones of an unfortunate native." Here her sister Clara just whooped out laughing in derisive tones. The poor, mortified father said: "Why, my dear, you must excuse me, I've never been to boarding school to learn to nibble; I was brought up a good spell ago, daughter, when times were hard and we were not taught manners."

A dear cousin once said to us with reference to home ties: "Oh, girls, there are no folks like your own folks; that you will better understand after you have left the roof tree."

## A SISTERHOOD.

It was a warm afternoon in early May, and as the north-bound train drew up at a small station, and then quietly permitted itself to be side-tracked, with the prospect of a half-hour's wait, many faces expressed weariness and dissatisfaction; but two young girls in the forward car appeared to be unconscious of the stop, so earnestly were they talking.

"You don't understand, Alma; you can't understand!" one was saying, impatiently. "I have thought over it and dreamed over it ever since I was a child. I want to give myself up wholly, to show by the beautiful, simple uniform which the Sisters of St. Elizabeth wear, that I have renounced the world and become a servant of God and of his poor. I can't see why mamma will not permit it. With three daughters, she surely might spare one to God."

"But you know you are the oldest, Jo," replied the other, gently, "and Aunt Alma needs your help."

"A servant could do all that I do," replied "Jo," impatiently, "and I wish you'd stop calling me that ridiculous name; we're not babies any longer."

"I keep forgetting," apologized Alma; but she said no more, for her cousin had drawn a small book from her pocket, and evidently meant to be absorbed in it. Alma looked intently from the window a moment, and then rose and left the car. A tired-looking woman, in a washed-out calico, was at the ticket-window, and on the shelf stood an earthenware jug, with a tin cup beside it.

"Is that water, and may I have some?" asked the young girl, pleasantly; and then, somehow, in a few minutes the two were chatting easily together, and presently the woman was pouring out her troubles.

"He" was "down with chills," and if she did not come every day to open the station at train time, "he" would lose his place; and their money was almost gone, and there'd be a doctor's bill a mile long "and I've just about give up!"

"You mustn't do that, ever!" said Alma, resolutely. "See here! Why can't you make a batch of doughnuts like that lovely one you've just given me, and cookies and gingerbread and sandwiches—just a few at first, till you see how it works, you know—and sell them to these poor "switched" people every day? Oh, and lemonade, and buttermilk! Will you try?" she went on, eagerly, "and will you just take this, to buy the first sugar and things? I'm sorry it's not more, but it's all I can spare just now."

She slipped a dollar into the thin hand, closing her own warm, plump fingers over it as she did so. The woman looked up, her face full of the light of hope.

"I declare!" she exclaimed, "I'm dumb as a beetle, or I'd have thought of it myself. For sure I will; and I won't let myself think no more that God don't take care of folks. It seems kind of foolish just to say thank you!"

She stopped abruptly, with a choking sound in her throat, and at that moment came a long whistle from the down train. Alma sprang up, hesitated a moment, and then as the woman joined her in the outer room, kissed the pale, plain face, and was gone.

She never heard the sequel to the scrap of a life-story which she had helped to make. She "passed that way but once."

Only a few of us are so free from the usual ties of life that we can with justice ignore them; to these few be all honor for their lives of self-denial. But He who has "made of one blood all nations of men" knows how we are dealing in our daily lives with his children, our brothers and sisters.—*Youth's Companion*.

## THE FIRST CRAZY QUILT.

The "funeral tent of an Egyptian queen" formed part of the sepulchral trapping discovered in 1882, in the royal tombs at Deir el Benari, near the ancient Thebes. The lady whose remains it had covered was a contemporary of the Queen of Sheba. Her grandfather may have bowed before the charms of Helen when the guest of Polydamna, "wife of Thon." Her son-in-law, Shisak, first king of the Bubastite dynasty, captured Jerusalem shortly after the death of Solomon. Queen Ish-em-Kheb, however, did not live so long; she died young, and her obsequies must have been celebrated within a few years of 1,000 B. C. The date of the "tent" is thus perfectly well ascertained. It is the earliest example extant of "opus consumatum," or patchwork. Constructed of innumerable fragments of gazelle hide, finely stitched together, its surface even now retains the gloss of a kid glove, and displays in marvelous freshness, considering the antiquity of their application, the four colors—red or bright pink, yellow (two shades), bluish-green, and pale blue—employed to produce a striking if somewhat gaudy decorative effect; an effect, to our ideas, strangely incongruous with its sombre destination.

The shape, size and design of this ample expanse of variegated leather (201 square feet in area) correspond unmistakably to its purpose as a canopy for the royal coffin. A central panel, nine feet by six, was adorned over one half of its surface with pink and yellow rosettes on a blue ground; over the others, with six flying vultures, emblematic of supernal protection, separated by bands of hieroglyphics, setting forth the earthly dignities and immortal hopes of the illustrious departed. Four attached flaps, checkered pink and green, completed the covering of the mortuary shrine. The borders display, among other emblems, gazelles kneeling in adoration on either side of a sacred tree or shrub. The device (with unessential modifications) was prehistorically diffused in the East, and is thought to have been connected with the old Aryan homa worship.

—*Edinburgh Review*.

## FOR THE FARMER.

Maida McL. seems to think farmers, especially poor ones, do not seem to care or notice how hard their wives work. Now, I beg to differ with her. I am a poor farmer's wife, always have been poor, have raised a large family, and worked very hard. I have seen my husband save his horses, and felt proud of his kind disposition, but at the same time I could not lay aside my work. I did work, and worked very hard, but I never for a moment doubted my husband's love for me. I think there are cases where men cannot help themselves; they may pity, love, and at the same time are powerless to save their wives from hard work, as they would desire. Then, instead of a woman complaining about it, and attributing it to a want of love on her husband's part, let her do just the work she is able to do, and no more, and she will find her husband will be satisfied, especially if he is the sort that shows mercy to dumb animals. Now, do not think because farmers do not keep help for their wives all the time that it is because they do not wish to; it is because they are not able, financially. If he neglected his stock and let them die for want of care, and he was working about the house, and everything going wrong on the farm, the family would suffer more for the want of the comforts of life than they would derive pleasure from the fact that their "shoes were pulled off and they were resting."

Oregon. ELLA DELL.

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## THINGS BEST LEFT UNDONE.

Do not write on ruled paper, or on that decorated with printed sunflower or blossoms of any kind.

Do not introduce your girl friend to the gentleman visitor. Instead, say, "Miss Brown, will you allow me to present Mr. Jones?"

Do not talk especially to one person when you have three or four visitors. Instead, make the conversation general.

Do not attempt to take care of a man's overcoat; he has a vote, and ought to be able to look after his own clothes.

Do not ask people who they are in mourning for. If you don't know, wait until you find out, and in the meantime, don't ask after the members of their family.

Do not giggle when a smile would answer, and don't talk in a jesting way about things that are holy to other people.

Do not laugh at anybody's form of worship; respect a toad praying to a mushroom.

Do not say the rules of etiquette are nonsense; they are made up for your comfort and mine, and arranged so that the feelings of every human being are considered.

Do not get into the habit of laughing at elderly people. It is not only unladylike, but it is vulgar.

Do not think it clever to find out, by pumping, the private affairs of your friend. There is no reason why you should lay bare her heart for an inquisitive daw to peck at.

Do not get into debt; but if you have been guilty, deuy yourself everything possible that you may be free once more.

Do not believe that all these don'ts are not spoken to you in the kindest manner, as from girl to girl, but one has to suffer and make mistakes oneself to find out into just what pitfalls one is apt to tumble.

A German test for watered milk consists in dipping a well-polished knitting-needle into a deep vessel of milk and then immediately withdrawing it in an upward manner. If the milk is pure, a drop of the fluid will hang to the needle, but the addition of even a small proportion of water will prevent the adhesion of the drop.



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## Our Sunday Afternoon.

## AFTER HARVEST.

THE days of harvest are past again; we have cut the corn and bound the sheaves, And gathered the apples green and gold, 'Mid the brown and crimson autumn leaves. With a flowery promise the springtime came, With the building birds and blossoms sweet; But oh, the honey, and fruit and wine! And oh, the joys of the corn and wheat! What was the bloom to the apple's gold, And what the flowers to the honeycomb, What was the song that sped the plow To the joyful song of Harvest Home?

When the apples are red on the topmost bough, We do not think of their blossoming hour; When the vine hangs low with its purple fruit, We do not long for its pale-green flower. So, then, when hopes of our spring at last Are found in fruit of the busy brain, In the heart's sweet love, in the hand's brave toil,

We shall not wish for our youth again. Ah, no! We shall say with a glad content: "After years of our hard unrest, Thank God for our ripened hopes and toil! Thank God, the Harvest of Life is best!"

## INGERSOLL'S NARROW LIMIT.

In his eulogy of an eminent leader in what is called "free thought," Colonel Ingersoll says: "He knew that miracles were not, because they are not." There, my boy, is the cornerstone of doubt; that is the creed of unbelief; in religion, in politics, in anything, "whatever isn't never was." The plesiosaurus haunts the Jersey marsh no more; there never was a beastly saurian with a name and neck so long. As the dodo is not now, the dodo never was. What is not to-day was not yesterday and will not be to-morrow. The miracle of the "talking machine" which will preserve the genial colonel's pleasant voice to coming generations—long, long years and many of them may there be before we have to go to the phonograph to hear the tones that voice his eloquence—was not in the time of the older miracles, therefore it is not to-day. We have not the Damascus steel to-day; there never were Damascus blades. The Tyrian purple is not now in all our arts; the Tyrian purple never was. The "lost arts" are not lost, they simply never were. My boy, if you adopt that creed, you will perform a miracle upon yourself; you will transform yourself from a living, active, progressive, growing man, into a hitching-post; into a thing that is there to-day because it was stuck there yesterday, and is going to be there to-morrow because it is sticking there to-day. Go to, my son; nobody believes such a doctrine; Colonel Ingersoll doesn't believe it; his dead friend, over whose ashes he spoke so lovingly and tenderly, didn't believe it; no man can believe it and live. There were a thousand things that are not; there are a thousand things to-day that will not be to-morrow.

—Burdette, in *Brooklyn Eagle*.

## "CHRISTIAN SCIENCE."

There was a funny incident out in one of our intellectual suburbs the other day, which, at any rate, did not go far to help on this particular Christian science doctrine. (The intellectual suburbs, by the way, are chiefly to the north of Boston. The southern suburbs excel in wealth and social distinction, but they do not run to intellect as some of the northern suburbs do, says the *Transcript*. Is there any explanation of this in the origin and history of the respective towns, or is the one fact merely the logical accompaniment or consequence of the other?)

The occurrence was in this wise: A prominent expositor of the doctrines of Christian science was invited by a number of ladies in one of the suburbs, who had become interested in these doctrines and wanted an authoritative exposition of them, to come out and talk on the subject. She came and began her address in a small lecture-room.

"Ladies," she said, "I wish to impress upon your minds that nothing exists as it appears to us to exist. All matter is unreal; it is a delusion, a hallucination. Nothing is matter—all is mind. And this truth does not apply merely to what is

called disease and its phenomenon. The most ordinary things about us are as much hallucination as so-called disease. I will give you a striking illustration.

"Yesterday I was engaged in housework, and I had occasion to cut up and prepare a number of quinces. Now you all know how quinces are supposed to stain and blacken the hands. For days and days under the old thought, I have worn upon my fingers the dark stain made by paring quinces. Well, as I worked over these quinces yesterday, paring, quartering, handling them, I thought, 'How foolish, now, to suppose that these unreal, unsubstantial, non-existent things should stain my hands!' and I resolved that they should not stain my hands, and that I would not look at my fingers until my work was over, and then would find them perfectly clean. Well, ladies, not only did I pare and quarter those quinces, but after I had completed them I had occasion to cut and prepare a number of tomatoes, and you know how dreadful they are supposed to be. I pared my tomatoes, cut them and sliced them, handling them freely all the time, and when I was all done with both I rinsed my hands and looked at them, and they were perfectly clean and white, with not a stain upon them!"

When the "scientist" had reached the stage of the tomatoes, the women of the audience began to look wonderingly and significantly at one another, and when she announced the miracle, handkerchiefs were stuffed into mouths all over the little hall and chests were heaving with suppressed laughter. Being in considerable part housewives, the ladies knew that in the nature of mere material things the juice of tomatoes will wash away and utterly remove the stain of any other fruit whatsoever, and that after cutting up tomatoes not a vestige of the quince stains could have been left upon the woman's hands, Christian science or no Christian science.

## HER IDEAS.

At an uptown reading class, a few days since, the question arose as to what were the ten elements necessary to happiness in a woman's life. The answers were curious. Here are two selected from the number showing from what different points of view two women can regard a given subject:

1. No nerves. 2. A good digestion. 3. Money galore. 4. Self-satisfaction. 5. Independent widowhood. 6. A capability for enjoyment. 7. The faculty of forgetting. 8. The knack of always saying the right thing in the right place, instead of thinking of it afterward. 9. To expect little from one's friends. 10. To die at forty.

1. A clear conscience. 2. Perfect health. 3. Congenial work. 4. Some measure of success. 5. A few tried friends. 6. To be considered attractive. 7. To retain forever a few illusions. 8. To be able to relieve some of the misery one meets. 9. To be philosophical. 10. And to keep from falling desperately in love.

## HELP WITH THE LESSONS.

Mothers, if you can possibly find time, help the children with their lessons. They will take more interest in them if you do. Have the little ones recite to you; pronounce the hard words for them, etc. Every mother who loves her children, wants to see them intelligent men and women, and if she exerts all her strength to make them so she can have that supreme pleasure. If you are a busy mother, who has to spend every spare moment with a needle in your fingers, you might get one of the older children to read aloud to all, you correcting and explaining as she reads. In this way you can do your sewing and interest and instruct the children at the same time. —*Rural New Yorker*.

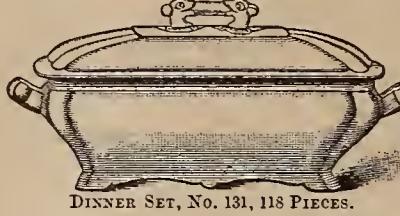
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## Our farm.

## THE POULTRY YARD.

Conducted by P. H. Jacobs, Hammonton, New Jersey.

## HOW TO SELECT THE LAYERS.

ONE of our readers makes the suggestion that it would be valuable to possess such information by which one could select the hens that will lay from those that may not be so productive, thus saving the expense of keeping a large number of dronest in the flock. The suggestion is an excellent one, although we have before given information in that direction. But to attempt to select the prospective layers is as difficult as that of anticipating the amount of milk a heifer will produce before she comes in with her first calf. As with cattle, the matter is one of observation, and we doubt if there is any class of stock on the farm—either animals or birds—that will give indications of their prolificacy before they begin production. Hens differ individually and they differ as breeds. Knowledge of their individual characteristics can only be gained by constant association with them and careful observation of their traits.

The laying hen is one that is active and busy. A good scratching hen—one that is never idle—is, as a rule, a good layer, for the reason that her active habits keep her in the proper condition for laying. Hence we may advise that, in selecting, let the busy, active hen be retained. A bright red comb, bright wattles and a happy disposition are indications, while bright eyes and clean feathers also point to success. All hens have bright red combs when beginning to lay, but it is before the hens begin that more information is desired.

The best method is to breed for good layers. Select the best layers every year and mate them with a male from a good laying strain, or breed, and the shortest road will at once be taken. When one finds a lot of drones in the flock, get rid of them and breed from those that are productive. The rule that "like begets like" holds good with poultry as with anything else, and should lead to the production of better stock, but it is important that the male be given some consideration, when selecting breeding stock, as his influence on the future progeny is greater than that of any female in the flock, he being the sire of all instead of a few only.

## WHAT TO DO WITH ROUPY FOWLS.

What course should be pursued with hens that have had the roup, but which only slowly recover? We are aware of the fact that many desire to save hens that are valuable, and as long as such is the case, remedies for roup will be in demand. But if the labor bestowed on such fowls, in order to cure them, be considered, another view of the matter will be presented. Roup is a disease that may be rightly classed as incurable, for a fowl once affected with it is never again in a healthy condition, no matter how apparently well it may appear after it has been treated. To attempt to give medicine to a roup fowl is to undertake a task very unremunerative, to say nothing of the disagreeable part of the work, and as roup leads to diphtheria in humans, it is unsafe to handle such fowls. We do not believe it necessary to destroy all birds that show the effects of exposure and which have simple colds, but when the foul roup odor is discernable, the use of the hatchet is the better mode of treating fowls, as time, labor and expense is saved by the operation. We admit that we offer roup remedies, but they only relieve cases, and sometimes make cures, but it does not pay to attempt a cure of roup.

## KILLING STRAY FOWLS.

The supposition that you can kill an intruding fowl, belonging to your neighbor, is erroneous. If a bird damages your garden, you can catch it and take it to the pound keeper and claim damages; but you have no more right to kill or poison your neighbor's fowls than you have to kill his horses or cows.

## POULTRY SHOWS AT FAIRS.

The managers of state fairs should give more attention to poultry, as the poultry department is usually one of the most attractive features of our fairs. No prizes should be given to nondescript birds, and all awards should be made by competent men. Suitable buildings should be used, as the old maxim, that "anything will do for chickens," will result in the breeders of choice birds keeping away, as they cannot afford to risk loss by exposing their valuable birds to draughts of air and crowded coops. A large number of persons who have no facilities for keeping cattle, or other stock, are interested in poultry (even those living in cities), and if the poultry display is large and attractive the number of visitors to the fair will be greatly increased.

## A ROOMY HOUSE.

A house for twenty-five fowls is given in this issue, and it is so constructed as to combine plenty of room on the ground and plenty of light. The main portion is 10x10 feet and the shed 6x10 feet, but it may be made of any preferred size. It is 8 feet high at the front and 6 feet at the rear of the main part, the roof to be of tarred felt. The shed, or covered run, should be 4 feet high where it joins the main part, or 5 feet if desired, with just enough slant to carry off the water. The windows may be arranged in any manner preferred, as we only aim to give the design, leaving the reader to improve on it. The shed is covered with greenhouse sash, and two small windows are placed above the shed. There also two windows on the

scraps are put to use, and when the labor is of but little value, the cost is reduced and the profits larger.

## THE ADVENT OF CLOVER.

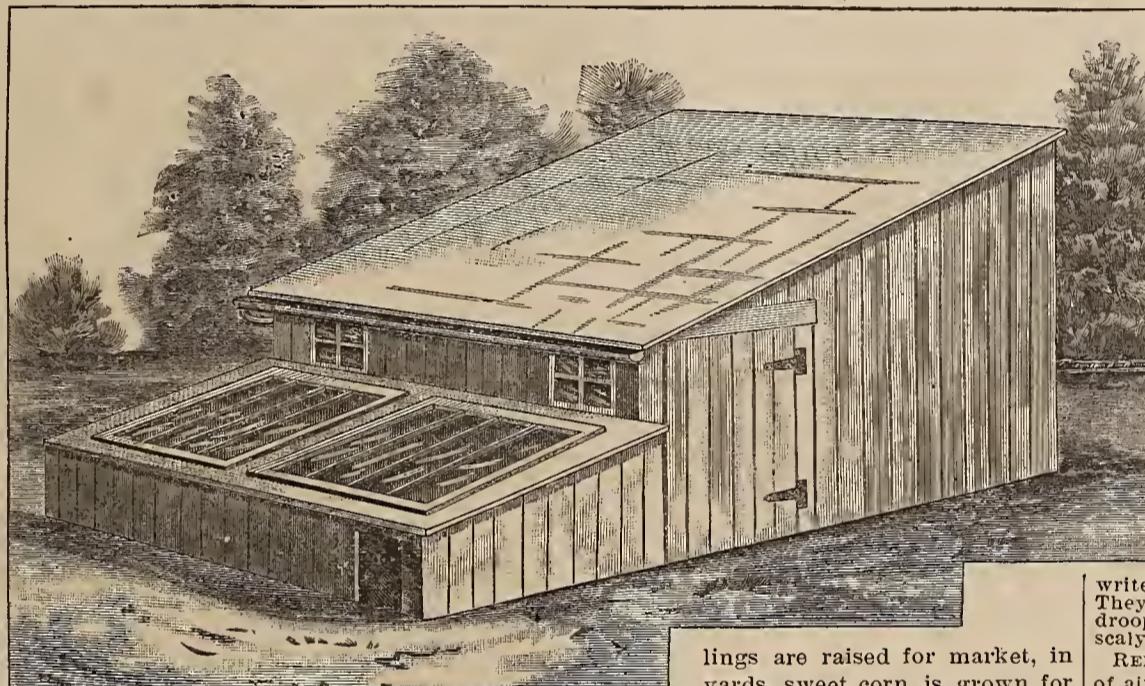
Until within a few years ago no one ever supposed that anything but grain was suitable for poultry, but we now not only use grass in the summer but hay in the winter for the hens. It has been found that cut hay is not only cheaper than grain, but is as important in the ration of the hen as for that of the cow. Good clover hay contains more nitrogen and more mineral matter than grain, and the hens will lay more eggs and keep in better health by its use in connection with grain than to confine them to a grain diet exclusively, while the saving in the cost of the food, by reason of the use of clover in place of a portion of the grain, is very large.

## EXPERIMENTING WITH DISEASES.

When a fowl is sick it is advisable to make a few experiments, not so much with a view to meet with success, but to observe and learn. It is the duty of every poultryman to do so, and to make known such experiments, in order that others may be benefited. There are hundreds of details met with in the management of poultry that give more light to the inexperienced than he can learn by reading, and an interchange of opinions should be always desirable.

## GROWING SWEET CORN FOR DUCKS.

Ducks are very fond of young corn, especially when it is about a foot high. On large duck farms, where many duck-



A ROOMY HOUSE.

What course should be pursued with hens that have had the roup, but which only slowly recover? We are aware of the fact that many desire to save hens that are valuable, and as long as such is the case, remedies for roup will be in demand. But if the labor bestowed on such fowls, in order to cure them, be considered, another view of the matter will be presented. Roup is a disease that may be rightly classed as incurable, for a fowl once affected with it is never again in a healthy condition, no matter how apparently well it may appear after it has been treated. To attempt to give medicine to a roup fowl is to undertake a task very unremunerative, to say nothing of the disagreeable part of the work, and as roup leads to diphtheria in humans, it is unsafe to handle such fowls. We do not believe it necessary to destroy all birds that show the effects of exposure and which have simple colds, but when the foul roup odor is discernable, the use of the hatchet is the better mode of treating fowls, as time, labor and expense is saved by the operation. We admit that we offer roup remedies, but they only relieve cases, and sometimes make cures, but it does not pay to attempt a cure of roup.

Experiments made in different sections show that the cost of feeding a hen one year is about \$1, and that the profit is about the same, the gross receipts from the hen being about \$2 a year. Of course this varies according to the breed, cost of food and location, being sometimes more and sometimes less; but it is accepted that \$1 pays the cost and \$1 profit is made from each hen. With small flocks, where table

front of the house, which, of course, cannot be seen. The nests and roosts may be placed on the side opposite the door, or under the windows at the front, but the windows must be very tight if this is done. The entrance for the hens is in the shed. There is no partition between the main part and the shed. The house may be built at a cost of \$25. A house combining a dozen like this (on an extension) may be built, if preferred, with yards 10x100 feet.

## POULTRY AND POTATO BUGS.

A flock of fowls in the potato field will eat the larvae of the potato beetle, but will only occasionally eat the mature beetle, as it is too hard and tough. Unless the fowl kills the beetle it will be unsafe for the fowl to swallow it, as the result will be fatal to the bird. A flock of turkeys were observed devouring beetles, but the turkeys died; an examination of the crop showing the beetles to be alive. As the turkeys could not kill the beetles after they reached the crop, the turkeys died of starvation.

## ONE DOLLAR THE AVERAGE.

Experiments made in different sections show that the cost of feeding a hen one year is about \$1, and that the profit is about the same, the gross receipts from the hen being about \$2 a year. Of course this varies according to the breed, cost of food and location, being sometimes more and sometimes less; but it is accepted that \$1 pays the cost and \$1 profit is made from each hen. With small flocks, where table

lings are raised for market, in yards, sweet corn is grown for them. The corn is cut up fine with a cutter, and the ducklings

eat it readily. They are also allowed a mess of ground grain twice a day, with grass or other food that may be convenient, but the main food is young corn. Sorghum or millet should answer the same purpose, and clover is the best of all. Fed in this manner, the expense of raising the ducklings is materially lessened.

## SORE EYES AND BLINDNESS.

Many complaints are made that hens and chicks are affected with sore eyes, and sometimes blindness, which is not usual in the summer season. The cause is the free use of the top ventilator, which permits of cold draughts of air on the fowls at night during damp weather. When blindness results, there is a possibility that the bird has contracted roup; but the sore eyes means simply a cold, and may be cured by preventing draughts. Anoint the eyes once a day with a few drops of a mixture of one part spirits turpentine and four parts sweet oil.

## CORRESPONDENCE.

PROFIT AND MANAGEMENT.—For the general run of a farm, Brahmans, Cochins, Plymouth Rocks and Leghorns will yield the best returns, but it seems that "farmers," as a rule, stick to their mongrel breeds. To those who insist upon this, allow us to suggest that at least get a thoroughbred male. A Dorking will give you a fine quality of meat, and more of it, if crossed with your largest hens; and a Brown Leghorn, with Plymouth Rock hens, will not only make a fine table fowl, but will insure fertile eggs and plenty of them. Our young Leghorns have fairly popped out this season, we having had thirteen and fifteen

chicks hatch from as many eggs. The time will come when farmers' tastes will be cultivated, and they will find the error of keeping a lot of mongrels about them.

Many persons fail to keep poultry profitably because in many yards the fowls are sadly neglected, and it is a very popular error that mongrels will surpass any of the pure breeds as regards useful qualities. Nearly all fowls, no matter how much neglected (if not frozen or starved to death), so long as they are in good health, will lay freely all summer. Of course, eggs are cheap, then, and it is in the winter where we find the profit and loss; therefore we urge upon you to care for the comfort of your fowls when they need it most. We know of no breed living that will produce more large, fine eggs, on less food, than the single comb Brown Leghorn. We do not speak of this boastingly, but we have given most all the breeds a fair trial, and we selected these fowls above all others, years ago. Besides, they make excellent table fowls, and we know of no better fowl used for crossing. There are many breeders who use a male bird of this variety on Plymouth Rock hens and other breeds. If treated rightly, the domestic fowl is the most profitable of all live-stock; but that it seldom is treated rightly we are more convinced by the experience of past years. Proper accommodation, proper selection and proper feeding are the three essentials to successful poultry raising.

B. A. Fox.

## INQUIRIES ANSWERED.

**Peafowl Feathers.**—H. C. Y., E. Bethlehem, Pa., writes: "I would like to know, through your query column, where I can sell my peafowl feathers."

**REPLY:**—Tail, wing and other feathers of all kinds are received on consignment, in the large cities, by commission merchants.

**Making Hens Lay.**—W. L., Nashville, Tenn., writes: "Please tell me the best method of making hens lay."

**REPLY:**—We are endeavoring to inform you in each issue, the matter of laying depending on the attention and management given. The question could only be fully answered in several columns, or even a book, but we can at least suggest but little grain and more meat and grain food at this season.

**Cholera.**—M. B. B., Smith Centre, Kan., writes: "My hens act as if their eyes hurt them; their heads hang down, and they die. They are very fat, but have red combs. I lost seven in one day.—My young turkeys are lame, feet twisted, and I have lost over thirty of them."

**REPLY:**—The large loss suggests cholera, as no detailed symptoms are described. Give no water other than that provided by adding a teaspoonful of liquid carbolic acid to two quarts of drinking water.—A high roost will cause the young turkeys to become lame, and so will the feeding of sulphur in their food.

**Hens Afflicted With Blindness.**—Mrs. S. S., Greeley Centre, Neb., writes: "Please tell me what ails my hens. They get blind, can't see to eat, get poor, droop and die, and their legs get rough and scaly. What shall I do to cure them?"

**REPLY:**—The exposure to overhead draughts of air at night will cause colds and gradual blindness, but the probability is that the condition of your fowls is largely due to lice, which multiply very rapidly at this season.

**HOME STUDY.**—BOOK-KEEPING, BUSINESS FORMS, PENNMANSHIP, ARITHMETIC, SHORT-HAND, ETC., THOROUGHLY TAUGHT BY MAIL. CIRCULARS FREE. BRYANT & STRATTON'S, 449 MAIN ST., BUFFALO, N.Y.

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If afflicted with sore eyes use **Dr. Thompson's Eye-Water**

## Queries.

## READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should enclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query, in order that we may answer by mail if necessary. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Querists should not be written on paper containing matters of business, and should be written on one side of the paper only.

**To Kill Bermuda Grass.**—H. H., Traver Cal., wishes to know the best way to kill Bermuda grass. Will some one who has had experience please reply?

**Dairyman's Manual.**—J. P. B., Morrellville, Pa. The book you ask for is Stewart's Dairyman's Manual, published by the Orange Jud Co., New York.

**Plants Wanted.**—E. H., —. We cannot supply you with plants, trees or seeds. Write to the nurserymen and seed dealers who advertise in our columns.

**Grasses on Arid Lands.**—R. B., Cascade, Mont., writes: "If you have hints on grasses suitable for arid lands, please give them to me."

**REPLY:**—Send for special report on this subject to the Secretary of Agriculture, Washington, D. C.

**Transplanting Rhubarb.**—W. T. V. Canton, Ohio, asks: "What month will be the proper time to remove and reset it? What is the method of transplanting and how soon afterward can I get some for use?"

**REPLY BY JOSEPH:**—Take up, divide and reset in late fall or early spring. If planted in rich soil and with good cultivation, some of the stalks may be used of the next growth. See also "Notes from the Home Garden."

**To Get Rid of Weeds.**—W. P. B., Milford, Del., writes: "Tell me how to clear my land of wild onions. They injure our wheat very much."

**REPLY:**—If careful cultivation of the land in hoed crops with rotation in clover is not sufficient to keep them in subjection, try the following: Plow the ground in the autumn. Beginning in the spring as soon as it will do to work, cultivate the ground every few days. Fight it out on this line if it takes all summer. Usually, they can be eradicated by June.

**Crimson Clover.**—W. K. H., Bono, Ind., writes: "Crimson clover is spoken of very highly in some papers. Would it do well in southern Indiana?"

**REPLY:**—Crimson clover is a coarse-growing annual. It belongs to a warm climate, and from repeated experiments does not seem to be suited to the North. It is very productive, and makes fair hay, if cut early. Get a few pounds from any reliable seedsman, and experiment with it for yourself. In the South it is sown alone in the autumn, and the crop cut the following May.

**Club Root in Cabbage.**—G. W. G., Hillsdale, Pa., asks about cause and remedy for this disease.

**REPLY BY JOSEPH:**—The cause is a fungous growth; but I believe the life history of the vegetable parasite is not yet fully discovered. I know of but one preventive, and that is rotation. Put the cabbage crop on a new location every year. Cabbage planted after cabbage on same land will usually be attacked by club root. Plenty of lime in the soil is said to be another preventive.

**Permanent Pasture Grasses for South Carolina.**—J. L., Clover, S. C., writes: "What kind of grass is best suited for permanent pasture, also the best time for sowing it? I am thinking of trying orchard grass and Kentucky Blue grass together. Clover does not succeed well here."

**REPLY:**—We suggest that you write to the agricultural experiment station of your state at Columbia, S. C., for information on this subject. We could not advise you to depend on orchard grass and Blue grass, as they may not be adapted to your soil and climate. It would be well, however, for you to experiment with them in a small way at first.

**Planting Asparagus.**—L. H., Spring Valley, Ohio, writes: "Will asparagus roots live when set out in the fall? When is it best to set them? Please tell me the best way of preparing the bed."

**REPLY BY JOSEPH:**—Asparagus may be safely transplanted at almost any time of the year. A good time, if not the best, is in the fall after the tops have matured. Prepare the land as you would for any hoed crop, mark out deep furrows from four to six feet apart, and set the plants about two feet apart, covering lightly. Then fill the trenches with compost. This will give you fine, large stalks the second season after setting.

**Sweet Potato Growing.**—Inquirer, Trenton, Mo., asks for instructions whether to cut the vines off, or allow them to run promiscuously all over the ground.

**REPLY BY JOSEPH:**—Plenty of foliage is always necessary to full development of tubers, both in white and sweet potatoes. The only thing needed in inquirer's case is to lift the vines up from the ground from time to time, by means of a pitchfork or similar tool, in order to prevent them from striking root. Whenever they do this, tubers are formed which will not grow large enough to be of use. The energies of the plant should be saved and concentrated upon the formation of tubers in the hill.

**Johnson Grass.**—J. G., Moon's Valley, Miss., in answer to a query, writes: "We have plenty of Johnson grass here, and would like to get rid of it; but that seems out of the question, for the more you cultivate it the better it grows, and it will spread all over this country. There is one man who pastured his farm for seven years to get rid of Johnson grass, then plowed and planted it to corn. It did very well the first year, but the next year the grass came on so thick that they couldn't work the land at all. That was prairie land; the upland is not quite as bad. My advice is, not to get it off your land at all, for it is too coarse to make good hay. If you want it, it is very easy to raise. Just get a few pieces of root and plant them, then cultivate it for a few years and you will have a fine field of it."

**F. L. H.**, San Antonio, Texas, in reply to the same, writes: "Johnson grass in Texas can be planted in the spring broadcast, or from roots run through a cutting machine. It grows in nearly any soil; the better the soil the larger the yield. If you have field in the same, plow it up once in three years, or it will deteriorate and admit weeds. If you have only a small farm, let it alone. It will eventually take your place. If you can plant it away from all other fields, where you don't

expect to raise anything else, all right, but be reminded that whirlwinds or feeding your own stock will distribute the seed. As far as Johnson grass as a hay feed is concerned, all claim here that there is none better for cows or horses. If so situated, let your pigs root in the field in the winter, for the more you stir the more it will grow. It stands the drought, but is easily top-killed by a slight frost. It starts right along and makes from two to three crops; if circumstances and rains are favorable, up to four cuttings. Cut while in bloom. Sow from two to three bushels per acre. If you want a stand from the start, don't spare your seed. If you sow one quart of seed next year, by cutting seed and plowing the first patch you can secure enough for four acres. Johnson grass does not mature evenly. Some heads will be ripe when others are in blossom, so it becomes hard to gather seed by reaper on a large scale. If you have one half of an acre you can take a pocket-knife and cut the ripe seed heads and thresh in a wagon-box with a stick or flail. If you have only a small farm, let Johnson grass alone, for it will spread in spite of all precaution. It does not stand pasturing, but will die out. I cultivate it here in west Texas and it makes fine feed for all kinds of stock, but has made me abandon corn fields alongside of it."

**Insects in Cellar.**—L. A. K., Bowling Green, Ind., writes: "I have a cellar that was built last fall. It is walled with rock, and tiled. It is infested with some kind of an insect, so that I cannot put anything in it. The insects are about the size of a hen louse, and look something like a little spider. I whitewashed the cellar, thinking that would drive them out, but it did no good. What will drive them away? Do you think it would do any good to cement the cellar?"

**REPLY:**—It would be a good plan to cement the walls. To destroy the insects, spray the walls and floor thoroughly with the kerosene emulsion so frequently mentioned in this paper. Some mix sulphur with the whitewash. You can easily kill them by burning sulphur in the cellar, keeping it closed tightly during the operation. The following, clipped from an exchange, is very good: "We have been using air-slacked lime and carbolic acid combined, in proportion of two ounces of the crude acid to one bushel of lime, well stirred together. This makes a carbolate of lime, and is the best insect powder and deodorizer of anything we have found. As often as we clean out our houses or pens, which is every week, we use the above freely over the floors and perches, also in the nest-boxes. It is very light, and every motion of the fowls causes it to rise and permeate the air. It thus penetrates the feathers, etc., proving death to lice, gapes, the scale parasite and roup. Some have raised the question that lime has a tendency to produce white-legged chickens. Our observation is that when chickens have a tendency to show white legs they will do so regardless of lime, but a true yellow leg will not be affected so far as the lime is concerned. The scale parasite will be found more potent in producing white-legged chickens than any other cause. Carbolate of lime will destroy the scale parasite; hence its value as an insect destroyer, and as a disinfectant and deodorizer nothing can be better. The above trouble being controlled, our pets have an immunity against sickness, and the fowls against the care arising therefrom."

## VETERINARY.

Conducted by Dr. H. J. Detmers, Veterinarian of the Ohio Agricultural Experiment Station, and Professor of Veterinary Surgery in Ohio State University.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should enclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 35 King Avenue, Columbus, Ohio.

**Mare Mules.**—J. R., Cleveland, Tenn., writes: "What will keep mare mules from coming in heat every three or four weeks?"

**ANSWER:**—There is only one remedy; it is spaying. But the operation is not without danger.

**Bloody Milk.**—F. S., Jewett, Ohio. Not knowing the causes, and the conditions under which your heifer is kept, I cannot give you any definite advice, and can only say, avoid any possible irritation of the mammary glands; milk gently, but thoroughly, and give no food but what is perfectly sound. If your cow or heifer is grazing in the woods, take her out of them and put her in a good, open pasture.

**A Large Lump.**—R. E. G., Leetonia, writes: "My yearling colt has a large lump on its side just back of the left fore leg. It causes no apparent pain. It has been on over four months. The colt is in fair condition."

**ANSWER:**—Your description fails to give any clue as to the nature of the "large lump." I therefore cannot tell you what will become of it. Have the animal examined by a veterinarian.

**Thoroughpin.**—E. W. W., Holden, Mo. The swelling, probably, is a so-called thoroughpin or an enlargement of the synovial capsule. As your horse is not lame, you may just as well leave it alone, because to remove it requires very careful and exact treatment, and after it has been removed it easily returns. Isn't it rather imagination what you say about the moon? The poor old moon seems to do a good deal of mischief.

**Callosus Withers.**—L. B., Estabrook, Col., writes: "Can you tell me what to do for a hard lump on a horse's withers? It was caused by a saddle-saddle. It does not seem sore when you press it, but it does not get better when he is not used."

**ANSWER:**—A cure, very likely, is out of the question. The best you can do is to use a saddle high enough in the chamber not to come in contact with the callosity.

**Strained Tendons.**—F. S., Cambridge, N. Y. It seems the flexor tendons of your horse have been overstrained, and are in a state of chronic inflammation. Strict rest for a considerable length of time is indispensable, and blistering with oil of cantharides (one part of cantharides to four parts of oil, heated for an hour in a water bath and then strained) may do some good. The application, however, should not be made oftener than once every four or five days, and not be repeated more than twice. Whether your horse will ever again be able to go on the race track, I cannot decide without an examination; it depends upon circumstances, and upon the severity of the already existing morbid changes. It is essential to shorten the toes of the hoofs by paring from below, but the heels must not be

pared at all. The object of this is to throw more weight upon the bones, and less upon the tendons.

**Worms.**—R. J. S., Brents, Wash., writes: "I have an old brood mare that is troubled with worms. I have seen her pass them ten to twelve inches long. They are as thick as a lead pencil in the middle, and sharp as a needle at either end."

**ANSWER:**—Give to your mare on two successive mornings, on an empty stomach, a pill composed of tartar emetic, three drachms; powdered marsh-mallow root, half an ounce; and water as much as necessary to make a stiff dough, and then keep mare and colt away from low and swampy land and from stagnant pools and ditches of water. Feed no food but what is sound and clean, and water from a good, deep well.

**An Exostosis.**—I. R., Indiana, Pa., writes: "We have a five-year-old mare which has a hard lump on her left front leg. We first noticed it about two months ago. It grew very slow, and is now about the size of a half dollar, and extends about half an inch from the bone. The lump is on the outside of the leg, and about three inches below the knee joint, and is situated on the bone. The lump is very hard, but is not sore to the touch."

**ANSWER:**—The hard lump you complain of is an exostosis, or an osseous swelling, caused by an injury to the periosteum. If you wish to do something, you may get at a drug store an ounce of gray mercurial ointment, and rub in a little of it—as much as a pea or bean—once every day. It should be rubbed in thoroughly.

**Ringworm.**—L. S., Belfast, N. Y., writes: "I have a yearling heifer that has a spot on the middle of her back, which came last winter. It was small at first. It is now about as large as a silver dollar and half an inch thick, and of a drab color. She also had one on the upper lid of her eye, which she rubbed off about three months ago. Now there are six or eight small ones as large as a pea in a row on the same lid. They all resemble a wart."

**ANSWER:**—The skin disease of your heifer is known by the name of ringworm. It is contagious, but is comparatively easily cured, if you paint the affected spots once a day with tincture of iodine, or if you apply to them, once a day, some diluted carbolic acid. If the crusts on the place on the back are too thick, it may be well to soften them first with soap and warm water.

**Wire Fence—Hooks.**—C. M. B., Hayesville, Iowa, writes: "My mare was cut on a wire fence, about the last of July, on the right hind leg, in the joint. It swelled from the joint down, and I can't get anything to help it. I have been putting turpentine and axle grease on it. —Will cutting the hooks out of the eyes of a horse help their eyes much?"

**ANSWER:**—Such a wound requires strict antiseptic treatment—dressing with a two or three per cent solution of carbolic acid, or with iodine, and judicious bandaging. As it is now, you will do best to employ a veterinarian to undertake the treatment, and to patch up what you have spoiled. —What you call hooks is the nictitating membrane, or third eyelid. It serves to clean the eyeball, and should not be interfered with unless it is diseased, and then only by a qualified veterinarian.

**Diseased Eyes.**—O. B. K., Pentwater, Mich., writes: "When my colt was three weeks old he was taken with a diarrhoea, which we checked by giving powdered flour and blackberry root tea. When that trouble began to abate, I noticed that his eyes began to run. Now, there is a film over his eyes and he cannot see at all. Do you think that he will be wholly blind or can be helped?"

**ANSWER:**—The best advice I can give you is to have the animal examined and treated by a reliable veterinarian, because the nature of the disease does not appear from your description. If, however, a good veterinarian is not available, you may use an eye-washer, composed of acetate of morphine and distilled water (1:20). If there is much irritation, and of sulphate of zinc or sulphate of copper and distilled water (1:20) if no more irritation exists. Eye-washers are best applied by means of a glass pipette capped with a rubber bulb. Your druggist will show it to you and how to use it. The applications may be made two or three times a day.

**Skin Disease.**—J. T. M., Leecb's Corners, Pa., writes: "There is a disease among our cattle which breaks out on the neck and head, and spreads. Little lumps first appear, and then the hair comes off."

**ANSWER:**—Your description is rather meagre, and fails to throw any light upon the nature of the skin disease you complain of. There are several possibilities. For instance, according to your description, it may be mange, or the disease may be of an eruptive character. To make a definite diagnosis would require a thorough examination. It will be safe, though, if you will first wash every cow thoroughly with soap and warm water, and then, before they are perfectly dry, wash them thoroughly all over with a two per cent solution of carbolic acid (two parts of carbolic acid to 100 parts of water). While the cows are thus washed, outdoors, perhaps, the stable and other premises must undergo a thorough cleaning and disinfection. If this treatment is repeated two or three times, once every five days, you will very likely succeed in effecting a cure.

**Epizootic Ophthalmia.**—C. F. S., Leland, Miss., writes: "I have a fine Jersey cow which has been watering very much from her left eye. I bathed it with salt water, thinking it would relieve the cow of what appeared to cause her pain. To-day I find that she is almost blind. Tell me what to do in the event the other eye becomes affected. She has had the daily run of a well-sodded, Bermuda pasture interspersed with white clover, a little dogfennel and some pennyroyal. There are other cows afflicted in the same way. If possible, state cause."

**ANSWER:**—It seems you have to deal with a case of epizootic ophthalmia, a disease of which a full account was given about a year ago in these columns. It consists in a specific inflammation of the cornea, appears to be caused by bacteria, and therefore usually runs its course, so that not much can be accomplished by any treatment. An eye-washer composed of corrosive sublimate, one part, and distilled water, 1,500 or 2,000 parts, or, in other words, of one grain of corrosive sublimate and four ounces of distilled water, may be applied two or three times a day by means of a glass pipette capped with a rubber bulb, and may prove to be of some benefit. At any rate, it will be worth a trial.

**Heaves.**—W. S. A., Buffalo, N. Y. Heaves is a term which is applied to any chronic, incurable and feverless difficulty of breathing. Consequently, "heaves" may have various causes, and different morbid changes in the respiratory apparatus may be at the bottom of

it. The most frequent cases of heaves we have to do with in the eastern and central portions of the United States consist in a vesicular emphysema of the lungs, usually caused by fungi contained in dusty and musty hay. An improvement, therefore, is frequently effected if no hay is fed at all, or, at least, no dusty hay; if care is taken that the stomach and intestines are never unduly extended by voluminous food; if the bowels are kept loose, and if the animal is kept in a cool place, either outdoors or in a clean and well-ventilated stable. Ginger somewhat assuages the congealing, but does not effect a cure; neither do small doses of arsenic, although in some cases, at least, it seems that breathing becomes easier if every day a small dose of arsenic is given. It should, however, never be more than from seven to fifteen grains. —As to your second question, I am not acquainted with any of the veterinarians of Buffalo, and even if I were, I would, for obvious reasons, decline to answer your question.

**Strongylus Filaria.**—E. B., Long Hill, N. J., writes: "A disease has appeared in our flock of sheep. It commences with a cough and the sheep grows gradually weaker and dies. We have lost three; one sheep and two well-grown lambs. The lungs of one of the lambs had turned nearly white and were filled with small worms about two-inches long and as large as a small pin. The blood was thin and watery, the lung being filled with watery matter."

**ANSWER:**—The worms which kill your lambs are known by the name of Strongylus filaria. They pass their larva state in low and wet places; it is therefore advisable to keep your sheep away from places where the young worm finds favorable conditions for its development. Hence, particularly in the spring and forepart of summer, you will have to keep your sheep on high and dry ground, and to allow them no water except from a good, deep well. Hardly anything can be done for those already diseased. A great many so-called antihelmintic remedies have been recommended, but the trouble is, the worms are in the lungs, and the remedies go into the stomach, and forepart of summer, you will have to keep your sheep on high and dry ground, and to allow them no water except from a good, deep well. Hardly anything can be done for those already diseased. A great many so-called antihelmintic remedies have been recommended, but the trouble is, the worms are in the lungs, and the remedies go into the stomach, and forepart of summer, you will have to keep your sheep on high and dry ground, and to allow them no water except from a good, deep well. Hardly anything can be done for those already diseased. A great many so-called antihelmintic remedies have been recommended, but the trouble is, the worms are in the lungs, and the remedies go into the stomach, and forepart of summer, you will have to keep your sheep on high and dry ground, and to allow them no water except from a good, deep well. Hardly anything can be done for those already diseased. A great many so-called antihelmintic remedies have been recommended, but the trouble is, the worms are in the lungs, and the remedies go into the stomach, and forepart of summer, you will have to keep your sheep on high and dry ground, and to allow them no water except from a good, deep well. Hardly anything can be done for those already diseased. A great many so-called antihelmintic remedies have been recommended, but the trouble is, the worms are in the lungs, and the remedies go into the stomach, and forepart of summer, you will have to keep your sheep on high and dry ground, and to allow them no water except from a good, deep well. Hardly anything can be done for those already diseased. A great many so-called

## Our Miscellany.

## BABY MAGDALENE.

Gently, gently, lie and rest,  
Slumber sweet, on mother's breast;  
Make no sudden movement, lest  
You wake my baby queen.  
Softly, now, her eyelid closes,  
Sweetly baby now reposcs,  
Cheeks like earliest summer roses,  
Bonniest baby ever seen!  
Eyes like mother's, deepest brown,  
That from liquid wells look down!  
Crown her with a golden crown,  
Oh, crown my baby queen!  
Doubly welcome to our nest,  
Binding closer breast to breast,  
Making home a heaven blest,  
Bonny baby Magdalene!

—Atlanta Constitution.

Too much white chalk finds its way, in these days of adulteration, into powdered sugar.

It would be better for the health of the community if there were fewer frying-pans in the world.

FOURTY-THREE young ladies of New Orleans, members of different churches, are carrying on Christian work among the Chinese in that city.

If poultry can be given the run of the orchard from now on, they will be able to destroy large numbers of insect pests that prey upon the trees and fruits.

De Jinks—"Here's a nice cigar. I picked it out especially for you."

Merritt—"Thanks. I'd rather take the one you picked out for yourself."

In hot weather, the midday meal should be the heartiest for those who would be both healthy and comfortable. Late dinners, some one has said, should be ruled out from May to November.

ANY one desiring a picture of the "Blue Grass Palace," and printed matter descriptive of south-western Iowa, can secure the above by sending their address to G. E. McELWAIN, Sec'y, Creston, Iowa.

Miss Cora Cary, a western young lady who has recently made her home in New York, has organized a series of Sunday afternoon concerts. They are especially intended for the benefit of working women. They are held in the Knickerbocker conservatory, 41 West Fourteenth street, at half-past three, so as not to interfere with Sunday services. Miss Cary has a fine soprano voice, and is assisted by other artists.

## Recent Publications.

## EXPERIMENT STATION BULLETINS.

Sent free, on application, to residents of the state in which the station is located. Address Agricultural Experiment Station.

ALABAMA.—(Auburn) Bulletin No. 16, June, 1890. Corn, cotton, rye, chufas—conclusion from six years of experiments. Bulletin No. 17, July, 1890. Dry application of Paris green and London purple for the cotton worm. Report of Alabama weather service.

JAPAN.—(Imperial College of Agriculture and Driodrology, Komaba, Tokyo) Bulletin No. 8. Manuring experiments with paddy rice.

KANSAS.—(Manhattan) Second annual report for the year 1889.

MASSACHUSETTS.—(State station, Amherst) Bulletin No. 37, July, 1890. Feeding experiments with lambs. Analyses of fodder articles and fertilizers.

MISSISSIPPI.—(Agricultural College P. O.) Bulletin No. 12, June, 1890. Cotton-leaf worm.

NEW YORK.—(State station, Geneva) Bulletin No. 19, June, 1890. A method for the determination of fat in milk and cream. Bulletin No. 20, June, 1890. Pedigrees of dairy animals under investigation.

NORTH CAROLINA.—(Raleigh) Twelfth annual report for 1889. Bulletin No. 72, June, 1890. XII. The work of the horticultural division. XIII. The value of pea-vine manuring for wheat.

OHIO.—(Columbus) Bulletin No. 2, Technical series: IV. Flowering plants on the grounds of the Ohio State University; V. Fourth contribution to life history of little-known plant-lice; VI. Descriptive catalogue of the shells of Franklin county, Ohio.

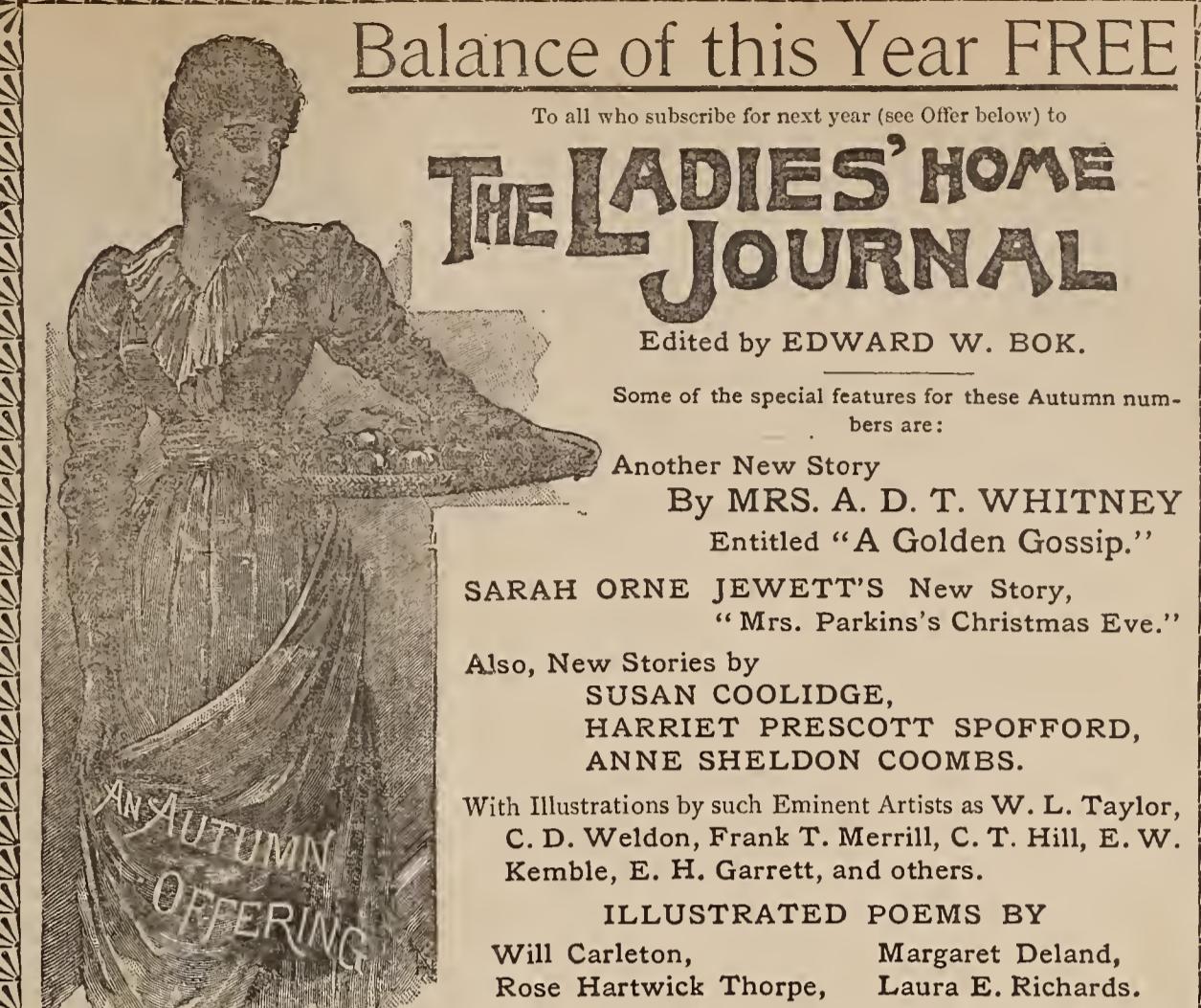
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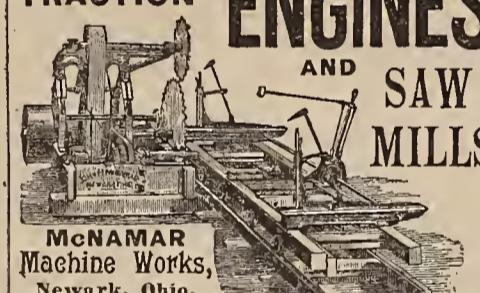
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"Put not your trust in riches, My son," an old man cried, And with this last sage counsel He closed his eyes and died. His son, with eyes still weeping, Vowed obedience then and there, So he put his riches in a trust And became a millionaire.

—Chicago Times.

## THE PANGS OF FORGETFULNESS.

As she sat in the cool, twilight air, A sweet vision of maidenly grace, All at once came a dream of despair Stealing over the beautiful face. And the suffering look in her eyes Faintly told of the sorrows to come, As she murmured the saddest of sighs, "Ah, me, I've forgotten my gum."

## THE SUMMER WAITRESS.

Come, come, thy sby, coy maid, hear my appeal—

Have I come to the end of this, my meal? Is this small ration all I am to draw? Must famine's tooth forever at me gnaw? You think I've had enough—not so—not so! Ah, little of a boarder's wants you know! If you'd but listen—if you only would!

She answers—

"Piecrust?"

—Boston Beacon.

## PAID OFF IN HIS OWN COIN.

REMARKABLE case of "diamond cut diamond" occurred in Boston recently, not far from the Providence Railroad station. A druggist had fitted up a neat corner store and had established at once a fine trade. One day another druggist entered his store and said: "I want to buy you out. How much will you take?" "I do not want to sell," was the reply. "I expected that answer," said the encroaching person, "and I am prepared for it. Now, if you don't sell out to me, I will open a drug store in opposition on the opposite corner. How much will you take?" The druggist, offended at this species of browbeating, said he would sleep on it, and report the next morning. At the appointed hour the aspirant was in the store, and a large price was named. The bargain was bound. The druggist who had been thus ousted from a corner which he had fitted up with a view to years of peace and profit, sought the owners of the opposite corner which had been held out to him as a threat, secured from them a long lease, worked night and day, and now has a drug store in which any community might take satisfaction and repose confidence. What is more, he is doing a better business than he did in the former locality.

## A JOKE ON GENERAL FISK.

Major Ford H. Rogers tells an amusing anecdote of the late General Clinton B. Fisk. The general was addressing a Sunday-school convention. One of the speakers had reminded the children that it was Washington's birthday.

"Children," said General Fisk, "you all know that Washington was a general. Perhaps you know that I am also a general. Now, can any one tell what was the difference between General Washington and myself?"

"I know, sir," piped a small boy in the back part of the room.

"Well, what was the difference?" said General Fisk, smiling at the lad's eagerness.

"George Washington couldn't tell a lie, sir," cried the boy in exultant tones.

Screams of laughter followed, in which the general joined as heartily as the rest.—Detroit Tribune.

## HIS PA WAS AWFULLY FAT.

Johnny—"Ma, will pa be an angel when he dies?"

His mother—"Yes, I guess so."

Johnny—"Will he have a harp to play on?"

His mother—"I guess so. Don't ask such foolish questions."

Johnny—"Well, if he holds it out in front of him, he'll have to have an awful small one, else he can only reach to play on about one third of it."

## THAT MADE A DIFFERENCE.

Miss De Simper—"I want to buy a diamond necklace."

Jeweler—"Something worth about \$1,500?"

Miss De Simper—"Oh, my! I am an actress and want something positively stunning."

Jeweler—"I see. Here is one with fifteen four-carat stones. I can sell you that for \$13.00."—Jeweler's Weekly.

## SLIGHTLY DIFFERENT.

"Eva," he said softly, as they strolled through the park, "let me call you Eve. It will make this place seem still more like the Garden of Eden."

"Certainly, George," replied the bewitching maid, "but I can't call you Adam. You—you are not my first man, you know. Not by several, George."

## AN ENTERPRISING YOUNG MAN.

"I like that young Mr. Freshleigh, Amanda. He was graduated this year, was he not?"

"Yes, pa. I am glad you like him, for I think he is real smart."

"He is real smart. He came to me at my office, yesterday, and said that as he expected to get through his vacation in September, he wanted to go into business, and what do you suppose he offered to do?"

"What, papa?"

"Said if I'd make him a full partner in the business he'd marry you."—Harper's Bazar.

## DOMESTIC DIPLOMACY.

"Papa," said the young mother, "I've decided on a name for baby: We will call her Imogen."

Papa was lost in thought for a few minutes; he did not like the name, but if he opposed it, his wife would have her own way.

"That's nice," said the present. "My first sweetheart was named Imogene, and she will take it as a compliment."

"We will call her Mary, after my mother," was the sturdy reply.—Harper's Bazar.

## GOT THE WRONG KIND.

"John," said Mrs. Digley to her husband after his return from a fishing trip, "you ought to spend an hour with our fishmen and get some points about the different kinds of fish."

"Er—what for?" demanded John.

"It looks a little inconsistent, that's all, to bring home mackerel when you've been fishing in fresh water."—Boston Herald.

## QUEER QUESTIONS.

"I'll send my boy to boarding school."

"What for?"

"Oh, he asks such infernal questions. Last night he wanted to know if a shoemaker could breathe his last."—New York Sun.

## HIS PROFESSION.

"If you'll go to work, I'll give you something to eat," said the kind-hearted woman.

"I can't follow my profession unless you do," returned the tramp, "for I am an after-dinner speaker."

## NOT A SERIOUS OBJECTION.

"You are welcome to these eggs, Uncle Ben, but I am afraid some of them are bad."

"Oh, dat don't make no differ'nce, boss, I ain't gwine to eat 'em; dey's fer settin'!"

## AT THE GARDEN GATE.

"Oh, George! Papa is unchaining the dog."

"It's all right. He used to be my dog. I gave him to the dealer to sell to your papa."—Boston Courier.

## LITTLE BITS.

If all flesh is grass, mummies must be hay.

When the government takes hold of the telegraph business, messenger boys will be required to grow beards and show that they are voters.

He—"The fools are not all dead yet."

She—"That's as true as you live." And he couldn't understand why she emphasized the "you."—Herald.

Lovers are slow about proposing this summer. Owing to the high price of the commodity, they hesitate about breaking the ice.—Texas Siftings.

Goethe says life is a quarry out of which a man must chisel a character. Other people will chisel him out of it quick enough if it be for their interest to do so.—Texas Siftings.

American millionaire (in Paris, proudly)—"My daughter is being waited upon by a duke."

Old Traveler—"Well, dukes make excellent waiters. There are several of them in our restaurant, too."—Good News.

"You needn't talk about keeping one's word," said a husband to his wife during a slight misunderstanding; "when I first asked you to marry me you declared that you wouldn't marry the best man in the world."

"Well, I didn't," snapped the wife.—New York Sun.

"John, Charles, William," cried the boy's mother, "where are those peaches I left here?"

"In our midst," returned the boy, and when the doctor called that night the mother knew that her little darlings had spoken truthfully as well as with a grammatical accuracy that is not universal.—New York Sun.

Hampden Sewall—"Doc, I wish you'd step down to the house and see my wife." Physician—"What seems to be the matter?" Hampden Sewall—"Oh, she's been working like a horse for two or three days and is all worn out." Physician—"Why don't you see a veterinary surgeon?"—Rochester Post-Express.

The marriage wasn't a month old and the young bride and her visiting mother sat watching the clock work toward midnight. "What is that heavy, broken, uncertain footstep coming up the stairs?" said the mother-in-law sternly. "I guess it's George, mamma. You know he always stammered, and here of late it seems to have somehow got into his walk."—Philadelphia Times.

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## DESCRIPTION OF THE PAINTING "CHRIST ON CALVARY."

**THE DEATH OF CHRIST, THE REDEEMER,** is the leading feature, toward which all others tend. Golgotha, the highest point on Mount Calvary, is where the eventful scene takes place. The crosses of Christ and the two thieves, the holy women and St. John at the foot of the Redeemer's cross, are placed to the right hand side of the painting. The high-priests and Pharisees are turning homewards to the left; whilst from the background in the middle the curious crowd press onward. They are checked by the spear of a Roman soldier. The cross rises high above everything else. The Redeemer, whom fanaticism and vindictive wrath have nailed to the cross, shines as if illuminated by an interior light; there is a noble symmetry in his body; and his face, furrowed by pain, is resplendent with heavenly love. This is the suffering body of a martyr, and at the same time the noble figure of the most ideal man that ever lived. Physical pain is expressed by a contortion of the body, which, while producing the desired impression, shows its lines to the best advantage. The breast slightly advances to the left, and the left shoulder is somewhat raised, and on it the weary, noble head falls back to one side. The eyes, plaintive like the lips, are raised toward heaven, whence no consolation comes; for black, menacing clouds chase by in wild fury, and dismal lightnings forbode the approaching storm. The sky immediately above Jerusalem is still blue, but it is a deep, oppressive blue, laden with electricity, and which will be rent by the first lightning, and over which the tempest-tossed clouds will burst from all sides, clashing together among thunder and lightning! To this threatening, desolate, gloomy sky Jesus sends his cry, "My God! my God! why hast thou forsaken me?"

**THE GROUP OF GRIEF** is at the foot of the cross. Mary, the mother of the crucified, is kneeling, broken down, before the cross; she presses with her hands the bleeding feet of the Savior and wets them with her tears. The mother's grief finds a heart-rending expression in her face. Near Mary kneels the beautiful penitent, Mary Magdalene, the upper part of her body thrown backward, covering with both hands her face, around which her gold-red hair is flowing. Behind both rises Martha Mary, startled by the moanings of the Lord, raising her face toward him, and extending her right arm as if she wanted to invoke the pity of the executioners. St. John stands erect, staring right before him. Hopelessness is depicted in his face. In these four representatives of grief, it is expressed in all its gradations most touchingly, as is natural, in the mother, toward whom the eye of the beholder always returns, as it draws by a charm. That narrow strip of the profile, which the kerchief leaves uncovered, is the noblest, purest and most pathetic expression of grief that perhaps ever has been produced on canvas.

The executioner, with the ladder on his shoulder and the hatchet in his hand, is just on the point of leaving, satisfied with his work, and looking unconcernedly, with all the rudeness of his calling, toward the group at the foot of the cross—every inch of him is coarseness. We seem to recognize in him the same repulsive individual that in the painting "Christ Before Pilate" cries, with outstretched arms, "Crucify him!" The thieves' crosses have been erected without symmetry, on either side and to the rear of the cross of Christ.

Above the mob of Jerusalem that presses onward to the cross, rises the Centurion Aben-

adar, who, detained by the exclamation of Christ, gazes with such an expression in his looks and countenance that we can easily read the confession on his lips: "That is a just man! that is the Son of God!" Beneath him, in the fore part of the center, the lad who, in his hasty downward course, is likewise checked by the lamentation of the crucified, looks back and stares in amazement at the bright figure of the Savior. To the left of these there is a large group, in which, beside the most unhending fanaticism, redeeming doubt is also clearly and precisely indicated. Above this group rises another Centurion on horseback, representing inflexible discipline, the important factor in the universal empire of Rome. His rigid, smooth, unimpassioned face betrays no emotion whatever. He is the counterpart of that other Roman, more to the right of Ahenadar, who is converted at the sight of Christ. To the left, in the background, we see a few men on horseback. A little further there appears, clear and full to the beholder, dominating the whole left of the painting, the aristocratic Pharisee, a vigorous man of from thirty-five to forty years, in white garment, on a white horse, splendidly caparisoned. Whilst leaving the place of execution he throws a last look of hate at the victim of fanaticism. In front of this horseman, and terminating the painting on the left, Judas, terror-stricken, is hastening away. There is wonderful movement in this figure, which, in reality, is a poetical license; for Iscariot, as is well known, had already committed suicide before the crucifixion; but necessity justifies this license. Tortured with self-reproach, Judas hastens from the sight of the crucified, as if he thus could find rest. Although in reality remorse had already driven him into death,

still the artist had to insert this episode into the tragedy to which it inseparably belongs, and place it at that moment into which he concentrates the whole event; for in a painting the drama of life is confined to a surface and to simultaneity.

Both in coloring and composition we find harmony, gradation, character and effect. The painting seems to issue forth from dark night, passing through all the shades of twilight, to the radiance that shines forth from the figure of the crucified.

It comprises about a half hundred figures and heads, and each one has its appropriate place. In each person and in each episode we can read exactly the intentions of the artist, so marked and eloquent is his characterization. The difficulty of perspective in representing such a complicated event on the summit of a lofty mount, has been overcome by genius. The painting has been animated in such a manner by the groups to the left of the plateau, on which stands the group of the cross, that there remains no view in this direction; whilst from the right of the plateau the view is open, and affords a prospect of distant Jerusalem below, which gives immense depth to the painting.

"Christ on Calvary" and "Christ Before Pilate" belong to one another intimately, and enhance each other's effect, one giving light to the other, and both shining in a common splendor. Separate they are immortal masterpieces worthy to be ranked with the paintings of the ancient masters of the brilliant period of art. But united they are, besides this, the representation of the most powerful and most important tragedy of all times—the tragedy of Christianity—the two greatest events of which have been reproduced by the genius of Munkacsy, the great painter.

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Fancy Cream'y...	17 @ 20	18 @ 20	18 @ 22
" Dairy.....	11 1/2 @ 12 1/2	12 @ 19	13 @ 15
Common.....	4 @ 7	7 @ 10	9
GRAIN.—			
Wheat No. 2w'ntr	1 00	1 03 1/2	
Corn, ".....	47 1/2 @ 50	56 1/4	64
Oats, ".....	37 1/2 @ 40	46 @ 49	50
LIVE STOCK.—			
Cattle, Extra.....	4 85 @ 5 00	4 85	
" Shippers...	3 75 @ 4 85	2 90 @ 4 00	2 25 @ 2 75
" Stockers...	2 00 @ 3 25		
Hogs.....	3 20 @ 4 10	3 50 @ 4 50	3 25 @ 4 00
Sheep, com. to good	3 50 @ 4 20	4 00 @ 5 50	2 25 @ 3 25
" Lambs.....	5 00 @ 6 00	6 00 @ 6 50	
PROVISIONS.—			
Lard.....	6 10	6 45	5 50
Mess Pork.....	11 05	12 50 @ 13 25	13 00
SEEDS.—			
Flax, No. 1.....	1 40		
Timothy.....	1 40		
Clover.....	3 00 @ 4 50		
Wool.....			
Fine, Ohio & Pa.....			
" Western.....	24 @ 26		
" Unwashed.....	14 @ 18		
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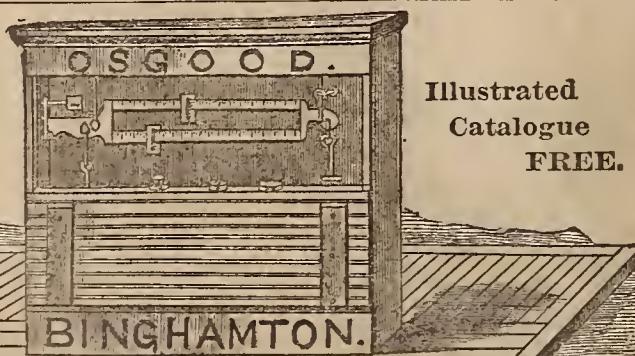
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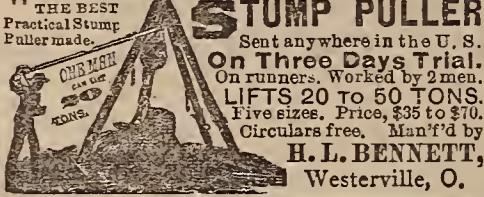


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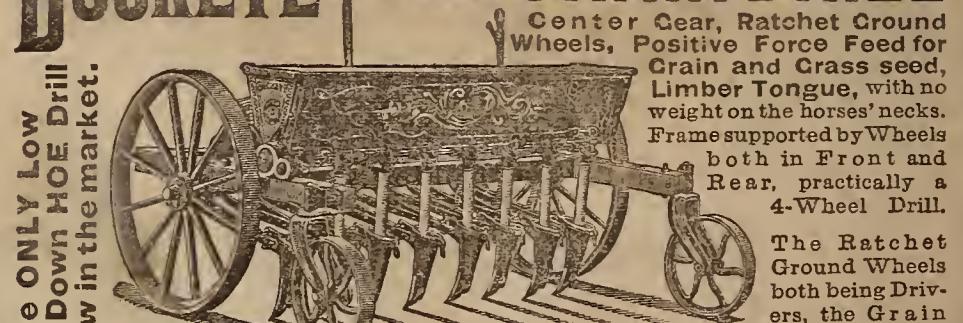
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# FARM & FIRESIDE

EASTERN EDITION.

VOL. XIII. NO. 24.

PHILADELPHIA, PA., and SPRINGFIELD, OHIO, SEPTEMBER 15, 1890.

TERMS { 50 CENTS A YEAR.  
24 NUMBERS.

The Circulation of FARM AND FIRESIDE  
this issue is  
**250,700 COPIES.**

The Average Circulation for the 18 Issues from  
January 1, 1890, to September 15, 1890, has been

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To accommodate advertisers, two editions  
are printed. The Eastern edition being  
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being 150,400 copies this issue.

Farm and Fireside has the Largest Circulation  
of any Agricultural Journal in the World.

## Current Comment.

THE thirteenth volume of FARM AND FIRESIDE is closed with this issue.

The annual index contained in the present issue is a complete key to the contents of the whole volume, and subscribers who have filed their papers will find it a handy addition to a valuable book of reference.

To serve the best interests of its advertising patrons, FARM AND FIRESIDE is published in two editions, the eastern and the western. The reading matter in each is the same. The advertising matter differs some. Sometimes, to supply the demands for advertising space, one edition contains more pages than the other, and, consequently, they are not paged alike. In order to make the same index do for both editions, the articles are all indexed by the department and the number of the issue in which they appear instead of by the page. Beginning with the first of October, the semi-monthly issues of each year are numbered from one to twenty-four, inclusive.

NO public policy is growing more rapidly in popular favor at the present time than reciprocity. The time has come for this country to enlarge its foreign trade by seeking and securing the most profitable markets for its surplus agricultural and manufactured products. The best way to do this is one of the commercial problems of the day. The solution offered by Secretary Blaine is to so revise our tariff system that its operation will tend to establish reciprocal relations with those countries where we can find profitable exchanges. For example, let us admit, free of duty, sugar from Brazil and Cuba, when those countries remove their duties on our products. There is the wisest statesmanship in the policy, and the people see it. Already, Brazil, through her minister at Washington, has expressed her willingness to enter into reciprocal relations with the United States on the plan proposed.

From a recent speech of Secretary Blaine we take the following extracts, which point out some of the advantages to be gained by reciprocity:

I am here to speak of the expansion of our foreign trade; not by any novel process, not by any mode that will shock or disturb home industries, not by any mode that will invite our people to rash experiments or that will launch us in doubtful and dangerous investments. What I mean to speak of briefly is a system of reciprocity not in conflict with a protective tariff, but supplementary thereto, and presenting a field of enterprise that will

richly repay the effort and energy of the American people. We shall find it instructive and valuable to examine into the sources of our imports and the destination of our exports, and to strike a balance between the two. Take last year, 1889. In that year our whole exports to all the countries in the three continents of Europe, Asia and Africa, and to Australia, Canada and Hawaii, amounted in round numbers to \$658,000,000; and our imports from all those countries amounted in round numbers to \$529,000,000, showing that from that vast trade we had a balance of \$129,000,000 in our favor, equivalent to that amount of gold among our people. But when all the accounts were closed, instead of having \$129,000,000 in our favor, we had a balance of \$13,000,000 against us from our foreign trade. We must, therefore, have lost \$142,000,000 in our commerce with the countries outside of those to which I have referred. Where could we have found so large an adverse balance? Let me tell you. We lost \$41,000,000 in Cuba, from which our imports were \$52,000,000, and to which our exports were only \$11,000,000. Forty-one millions is a pretty large sum to lose in one island in a single year. In the republic of Brazil we lost \$51,000,000. Our imports from Brazil were \$60,000,000; our exports to Brazil were \$9,000,000. In Mexico we lost \$10,000,000. Imports from Mexico were \$21,000,000; our exports to Mexico were \$11,000,000. To sum it all up, our imports from countries south of us, both insular and continental, on this hemisphere, were \$216,000,000; our exports to them were \$74,000,000. The balance against us in our trade with those countries, therefore, is \$142,000,000, exceeding our gains from all the rest of the world by \$13,000,000.

By no figure of speech can we flatter ourselves into the belief that our trade with our American neighbors is in a prosperous condition. How can this state of affairs be remedied? You have heard a great deal said, within the past ten years by our Democratic friends, about the iniquity of the Republican party keeping up the war tariff. As a matter of fact, the war tariff has not been kept up, but has been amended over and over again, until the revision of 1883 left scarcely a trace of the actual tariff that was in operation at the close of the war and for a few years afterward. During the war we were compelled to tax almost everything in the air, in the water, on the earth, and under the earth. The necessities of the government were so great that we could allow scarcely anything to be imported without paying tribute, and I think no patriotic man can deny that that was a wise policy. We were not then studying the philosophy of trade relations, but how to save the life of the nation. Money was the primal necessity, and we seized it wherever we could reach it lawfully. But during the last eighteen years a great change has been made. So entirely has the war tariff been abolished that in the fiscal year ending June 30, 1889, the articles admitted free were considerably more than one third of all the imports. To be exact, the imported articles that paid duty exceeded \$488,000,000 in value, and the imported articles that paid no duty exceeded \$256,000,000 in value.

The inevitable tendency is, I think, toward an increase in the free list. Our great mistake was made when we began to repeal the war duties on so large an amount of imports. Any duty repealed was a favor and an advantage to the exporting country, and we have asked nothing in return. Instead of this course (which I must say was one of carelessness and wastefulness by both political parties), every repeal of duty should have been preceded by a most thorough investigation, and whenever it was found practicable to export anything from the United States, and thus establish reciprocity of trade, it should have been done. I do not, of course, intend to declare or imply that we could have secured the free admission of \$256,000,000 of American products into countries whose products we purchase annually to that amount. The richer country cannot expect to get a complete reciprocity in amount

from countries less wealthy; but whatever we should have received would have been a clear gain, and in all future repeals of duties, whatever we may be able to get will be a clear gain. It is not a question of settling deliberately to work to establish reciprocal exchanges. But with all the duties we have thus far repealed, it has been a question of whether we should get something or get nothing. We have chosen, with our eyes closed, to get nothing. I hope now, with our eyes open, that we shall in future choose to get something.

THE workings of the new silver law have, so far, surprised the expectations of its best friends. At the rate at which silver is advancing in price, the silver dollar will soon be on a par with the gold dollar. Then we can have the free, unlimited coinage of both gold and silver without the least disturbance of the financial or commercial condition of the country.

There was a very general demand among farmers for silver legislation, and since it has been accomplished, "things are going their way." The advance in wheat has kept pace with the advance in silver. Not all the rise in the value of our products can be attributed to the advance in silver; there are other causes, but, undoubtedly, the new silver law has been a great benefit to agriculture.

The bearing the advance in silver has on agriculture is clearly pointed out in the following able editorial of the New York Sun:

The advance in the price of silver from 94 cents to \$1.20 per ounce has a wider bearing than seems to be generally appreciated. There is a general disposition to see in this new departure merely a variation in the amount of currency, or a speculative phenomenon incident to a great and sudden advance in the value of an important commodity.

We have heretofore, in round numbers, exported about 20,000,000 ounces of silver per annum, the remainder of our product being absorbed by government purchases and by use in the arts. For these 20,000,000 ounces there is now opened a market at home, and it would seem at first sight as if for their former export to pay our debts abroad we should have to substitute a corresponding export of gold, but this is not the case. In our three staple exports, petroleum, cotton and wheat, we come in competition with silver-using countries exclusively, with the exception of Australia. Egypt and India supply cotton and wheat to Europe, and with declining values of silver in terms of gold, so long as we were on a gold basis those countries were competing with us at a tremendous advantage. This is proved by the enormous increase in the exports of wheat and cotton from India during the last few years. By causing the appreciation of silver, as measured in gold, we make Indian wheat and cotton cost just so much more as the rise in the gold price of silver measures.

Of course, we cannot expect to get the full measure of this advance. The augmented price of wheat and cotton in India and Egypt must, to a certain extent, react in order to meet the increased competition from America. But European markets will rise in sympathy with the higher cost of these exports from those countries measured in terms of gold. Of our cotton crop we export in round numbers 5,000,000 bales, and of our wheat crop from 100,000,000 to 150,000,000 bushels. It is fair to assume that the advance under normal conditions in the price of the exportable surplus of these two staples would reach two thirds of the advance in silver, allowing one third to be taken off the increased standard for Indian and Egyptian wheat and cotton, to enable those countries to export at all.

As against the export of 20,000,000 ounces of silver bullion we have therefore the enhanced value of the exportable surplus of wheat and cotton, to say nothing of oil.

Assuming that we receive two cents per pound more for our cotton out of the now inevitable 30 per cent rise in the value of silver, we should thus have \$10 per bale added to the value of the exportable surplus of cotton, and thus the country would receive from Europe \$50,000,000 more than it has received from this staple previously. The same calculation applies relatively to our surplus of wheat and oil.

We believe it will be found that this new value of silver provides the true protection to our agriculturists. And the inferences to be drawn from these facts are plain. Given \$100,000 more in the pockets of our farmers, and it is safe to argue that an activity such as we have not witnessed for years in this country must follow in all lines and ramifications of business.

IN a Minnesota land circular, setting forth the wonderful agricultural resources of that state, we find the following statement: Minnesota's wheat crop for 1889, 46,660,000 bushels, worth to the farmer \$32,662,000, will make 10,370,000 barrels of flour, worth \$46,665,000; will make 2,074,000,000 five-cent loaves of bread, worth \$103,700,000, being forty loaves for every man, woman and child in the United States, which, placed end to end, would make a column of bread four inches square reaching to the moon and 20,000 miles beyond.

What most attracts the attention in this statement is not the size of Minnesota's crop, but the wide margin on wheat between the producer and consumer. The Minnesota farmers get less than one third of what the consumers pay for the crop of the state. Let us follow a bushel of wheat from the farm through the mill and the bakery to the consumer. The farmer sells a bushel of wheat for 70 cents, the miller grinds it, and sells the flour for a little more than \$1, and the baker makes the flour from this same bushel of wheat into bread, and sells it for more than \$2.20. The consumer pays more than twice as much for the transportation, milling and baking necessary for a loaf of bread as for the wheat from which it is made. On a bushel of wheat, the miller has a margin of 30 cents and what he can get for the offal, and the baker a margin of \$1.20; the farmer's margin between cost and selling price is—what? His margin cannot spare anything to make bread cheaper. Of course, all flour does not go through the hands of the trade baker, but the figures given show the margin on that which does, and also shows where the consumer must go to cheapen bread.

AGRICULTURE and manufacturing are not in conflict. They go hand in hand. For a country to reach its highest possible rank, its agriculture and manufacturing must both be fully developed. For many years the South has had its agriculture, but it has always been of the ultra conservative variety. For a few years the South has had manufacturing worthy of the name, and since its advent a change has come over the spirit of its dream, and it has been awakened to look upon the promise of an era of prosperity in agriculture the like of which it had never dreamed.

## FARM AND FIRESIDE.

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## Our Farm.

## NOTES ON BRITISH FARMING.

BY AN ENGLISHMAN.

[Continued from our last issue.]

## ROOT CROPS.

The great characteristic of British agriculture is the root crops. And at this point we may dwell upon the methods most in vogue with regard to rotation of crops.

## ALTERNATION SYSTEMS.

English landlords are wont to insert in the lease a clause relative to rotation of crops, or methods to be observed by the cultivator. Such clauses are to the effect that there shall be no two consecutive crops of grain; that no flax shall be grown, and that the roots and straw shall be all consumed on the farm. The aim, of course, is to prevent the land from becoming exhausted. This is one of the things that would make the American cultivator bestow a rather scornful pity upon the farmers who put up with dictation of this sort from their territorial lords.

The commonest system of rotation in England is that by which half the arable lands is devoted to green crops and half to grain. This will give a rotation as follows: 1. Wheat or barley. 2. Clover or rye grass. 3. Wheat or oats. 4. Turnips. This rotation is varied by the occasional introduction of vetches, potatoes, beans, etc. Under the designation of turnips are included the common turnip, Swedish turnip and mangel wurzel, all of them being the chief material employed for feeding bullocks and sheep during the winter months. The rotation indicated above is occasionally varied by one which gives two consecutive grain crops, oats after wheat; and the Scotch five-year rotation consists of turnips, wheat or barley, two years of grass, and oats.

## TURNIPS.

A good turnip crop requires nearly twenty tons of farm-yard manure, or three hundred weight of guano. But the best method is to combine a portion of superphosphate or bone dust with both guano and farm-yard manure. The manure is applied not only before plowing, but also with the seed, and the most approved method is to plow in both kinds of manure with the drills immediately following the plows. In dry weather a light roller is usually passed over the drills immediately after sowing, and the seed is deposited only half an inch below the surface. Two pounds per acre of globe or common turnip seed is used, and nearly one pound for Swedes. The time of sowing

is from the last of May to the middle of June. Fifteen inches should be allowed from plant to plant, and the ridges twenty-seven inches apart. The thinning is done as soon as the unrough leaf is developed. This thinning is called hoeing turnips, and is done with a hand-hoe. Usually, the horse-hoe is first passed between the rows. The chief point is for the hoers to leave the best plants.

In deep, strong loams the treading of the cattle injures the soil, but on poor, light and dry soils, the whole should be eaten on the spot. That part of the crop that is removed from the ground is taken up before the drenching rains and severe frosts commence. A portion of the turnips are sliced and distributed to the sheep in troughs, especially for sheep that are nearly ready for market. What are called the poor hogs of the flock are allowed to eat up the shells of the turnips after the fat sheep have had the first picking. It may be stated that on a farm in which there are one hundred acres under grain crops there will usually be about sixty acres in turnips and ten acres of mangel. It is only the white or common turnip that is eaten in the field; the others are stored, usually, in long heaps covered with straw and thin layers of earth.

## MANGEL WURZEL.

This valuable root sometimes reaches a weight of twenty pounds or over, and thirty tons to the acre is a common crop in the southern part of England. The fact that the mangel stores well, and may even be kept well into the following summer, is one reason why it is combined with Swedes, which have to be eaten quickly. The mangel requires a double dose of manure, and is improved by having two or three hundred weight of salt to the acre. It is stored early in the fall, as it is easily injured by frost.

## RAPE.

A small acreage of rape is usually grown on every sheep farm, and the leaves and stems are consumed by folding sheep in the fields, which, in the writer's experience, is the invariable practice, although some are said to carry it to the homestead.

## FORAGE CROPS.

A favored English farm will usually have one third in permanent pasture, and the more valuable part of this will be meadow lands, some of which are irrigated. The writer's experience goes to show that in spite of the enormous rents paid to the landlord (often as high as \$15 per acre), these watered or water-side meadows are what chiefly make an English farm desirable, and the quality of the pasture is such as has scarcely a counterpart in America. It is on these richer lands that the grazier fattens his stock. In the north and in Scotland the pastures are stocked with young and growing animals, which, later on, are fattened on turnips. In many parts of England the old grass lands are of that description on which the largest bullocks will fatten rapidly. These grass-fed cattle come to market early in July and throughout the summer. Throughout the winter, stall feeding is the English agriculturist's great resource, and this is the one product of supreme excellence of the English farmer, in which he defies competition.

If the writer passes in review the relative financial prosperity of a vast number of his English farmer friends, during the last quarter of a century, it is those who have been able to devote themselves to the production of the best beef who have most successfully weathered the terrible periods of agricultural depression. He has seen the wheat grower and the dairy farmer constantly losing money, while the producer of stall-fed beef has been as constantly making money. The history of British agriculture of late years may be summarized in that single statement.

In addition to the grass seeds of alternate husbandry, Italian rye grass, vetches, sainfoin, lucerne and red clover are in considerable favor in England. Vetches are especially adapted to poorer soils. The winter variety is ready to be cut by May 1st, and spring vetches, if sown early in March, may be eaten in July. The writer has not often seen sheep folded in vetches; more frequently they are fed with them from racks. Lucerne, which has long

been grown in France, has only come into use in England in recent years.

## FLAX.

The growth of flax has regularly declined, not only in Ireland, but also in Great Britain. The writer has been familiar with the somewhat laborious and malodorous processes connected with its cultivation, and there can be but little doubt that periods of agricultural depression will conduce to the restoration of an agricultural industry that is so unfailingly profitable. Flax should succeed pasture newly broken up, or oats. It needs a comparatively poor soil, with no manure, since rich soil affects the quality of the fibre. The careful weeding needed is the most costly part of the cultivation. It must be pulled as soon as the seeds begin to turn brown. It is put into sheaves, and the seeds are separated after a few days. It is macerated in water for eight or nine days, and then exposed on a meadow, where it lies for about two weeks. When perfectly dry, it is stored to await the process of raking and scutching, which separates the fibre.

## HOPS.

The hop farmer is the aristocrat among English agriculturists. An old-time proverb ranks the German baron one grade lower than the Kentish farmer. As much as seventy thousand acres of hops are cultivated in England, chiefly in Kent and Sussex, with small tracts about Worcester and Hereford. The taller varieties require poles nearly twenty feet in height. Hops require the richest soils, with manures containing much nitrogen. The best in England grow upon what is called the upper green sand, with phosphatic deposits. Hop picking begins about the second week in September, the pickers being in companies and using immense baskets of seven or eight bushels. The drying in kilns is a very delicate process. After this they are trodden into pockets.

## SUGAR BEET.

The cultivation of the sugar beet first began in the eastern counties a few years ago. With the sugar beet, the smaller roots are richer in sugar, hence the object is to get the roots exceeding but little an average weight of two pounds. The plants are left close together, and the roots completely covered. The yield is about sixteen tons per acre.

## MILK.

A paper gives an account of the arrest of a milkman for selling watered milk. The man declared that the milk was pure; that he knew one of his cows gave inferior milk, but that care was taken to mix with milk above the standard. In the present case, however, some of the inferior milk went to market unmixed, and it was this milk that the inspector secured.

It is easy to see how this might occur. The writer once owned a cow that gave remarkably thin milk. In other respects the cow was an ideal cow—large, with good escutcheon, finely formed and gentle as a lamb. When the pastures were fresh, she gave more than twenty quarts a day and often twenty-four quarts. She came from the pastures with an enormous bag, with the milk streaming from it, for she was an easy milker. But her milk—what was it? Merely water with a little milk in it—just enough to give it the appearance of milk. There was only a trace of fat in it. This milk, mixed with other milk, was sent to town every day, but if, as in the case referred to, it had been sent by itself and had fallen into the hands of the milk-inspector, then arrest and investigation must follow, and yet the milk was pure, just as it came from the cow.

It is hoped for the generation rising on bottles that not many cows as poor as the one referred to are in use, but there are many cows giving inferior milk, and if this milk be fed unmixed with a better grade of milk, children would starve. If a child is dependent on the bottle, the first duty of the parents is to learn the quality of the milk that goes into the bottle. The difference in the quality of milk has led to much discussion in regard to the treatment of milk above the standard. For example, the standard of milk requires twelve per cent of solids and fats. Now, if a cow gives milk that contains

twenty per cent of fats and solids, has a milkman the right to reduce the milk to the standard by adding water?

Strange as it may appear, this question has been asked, apparently seriously, by some persons interested. The farmer or the milkman has no right—certainly no moral right—to reduce the milk to the standard. While he may prove that his milk is up to the standard, yet he cannot say honestly that his milk is pure. He has put water in it, and that is enough—enough to condemn him in his own opinion.

Probably this reducing to standard is practiced by some who are blind to principle, and they are generally safe, for chemical analysis will not always show whether the water was added by the man or the cow. Milk, pure milk, we must have. What food product is more closely connected with the life of the people than milk? It may be said that milk is the life-blood of the nation; aye, the bone, the muscle of the nation. How important is it, then, that it should be above suspicion. The man who brings adulterated milk to the babes that live by it, tampers with life and may destroy life. It is a serious matter, this question of milk supply. But the farmer and the milkman may ask, what is the encouragement, except the consciousness of doing right, in selling pure milk, or what reward is there for selling milk at all—for stocking a farm with milkers and providing for their maintenance? If he sells to the middleman, the reward is two and one half or three cents a quart; if he delivers to customers direct, the price is six cents in summer and seven in winter.

When a cent a quart is added in the fall, there is complaint. The customer declares the price to be exorbitant and must look elsewhere for cheaper milk. And yet, this man orders a pound of steak at the butcher's and asks no questions and makes no complaint (it would do no good if he did) when the butcher cuts off a quarter of a pound (after he weighs it) and charges him thirty, perhaps thirty-five cents for three quarters of a pound of beef-steak. And yet there is more nutrient in a quart of milk—more food in it—than in a pound of beef. If the "power of milk" was appreciated, the price of it would not be considered; it would be cheap at any price. But it is fortunate for the great body of the people that the price is what it is. But whatever the price, let us have pure milk, and if the milk is above the standard, please deliver unreduced. If it be too rich, we can add the water ourselves.

GEORGE APPLETON.

## SUGGESTIONS FROM EXPERIMENT STATION BULLETINS.

BY JOSEPH.

GREENHOUSE BUILDING AND HEATING.—Prof. L. R. Taft, of the Michigan station, gives in bulletin 63 the results of his investigations concerning the best methods of building and heating forcing houses. The author's summary is, in substance, as follows: "In the construction of forcing houses for commercial purposes, we believe that the best results will be secured if the walls are built of grout (cement, sand and cobblestones) below the surface of the outside soil, with the portion above the grouting of wood, with from two to four thicknesses of boards, two of building paper and an air space. If properly built, however, a wall entirely of grout will be almost indestructible. We should build the roof of permanent sash-bars and use glass at least twelve inches wide. The butting of the glass has given us entire satisfaction.

The tests thus far made indicate that hot-water heating is both more economical and more satisfactory than steam heating, for small greenhouses.

We are well pleased with the Furman heaters, but there are others that seem equally reliable. The use of small, wrought-iron pipes, from one and one half to two inches in diameter, according to the size of the house (a smaller size, even, might be preferable for the returns in a small house), will be found desirable. For most purposes, the combined overhead and underbench system seems better suited than to have the pipes all overhead or under the benches. No test of overhead piping was made; but for houses used for forcing

cucumbers, etc., this system has given general satisfaction."

This bulletin is liberally illustrated, and the descriptions thereby made exceedingly plain and easily comprehended. Altogether, it is a very valuable addition to the literature on the subject, giving the very latest information about it that can be had. No reader of FARM AND FIRESIDE who intends to put up a forcing house this fall can afford to neglect studying this bulletin. Address request for copy to the Secretary of the Michigan Experiment Station, Agricultural College, Michigan.

I would call particular attention to the newer methods of glazing. The overlapping system seems to be now out of date. The newer methods require less glass, allow this to be adjusted and repaired with greater ease and convenience, and make a tight roof, which the oldlapping style never does. One of these improved methods involves the use of Gasser's glazing strips between the panes. This is a strip of zinc half an inch wide and of a length equal to the distance between the sash-bars. J. M. Gasser, of Cleveland, Ohio, manufactures and sells them; they are bent something like the letter Z, and are placed between the panes with one edge under the upper pane and the other over the under one. A thin layer of lead putty, placed between the strip and the glass, serves to cement the glass to the zinc and makes a joint both air and watertight. There is no danger of the glass slipping down, as often happens in a neglected roof, and if the panes become cracked, they are less likely to drop out than when glazed in the old way. The one drawback to this method is, that the strips shut out some of the light, amounting to three per cent when the panes are ten inches long, and two per cent when eighteen inches long. For forcing roses, etc., this loss will be a decided objection; otherwise, it will hardly be appreciable. The use of the strips will lessen the consumption of coal and the draft of air on plants.

Another method employed by Prof. Taft, was that of simple butting. Beginning at the bottom, a pane was laid and securely fastened. A thin layer of lead putty was then applied to the lower edge of the next pane, and this firmly pressed against the edge of the pane below, pushing out all putty that was not required to fill the irregularities in the edges of the panes. They were thus cemented together by a thin film of white lead putty, making in reality one solid pane in each row. Mr. Taft says that after the house had been in use all winter, he has been unable to find even a pin-hole through which water or air could pass. In this method, which is also cheaper than any other, there is no loss of light. The resetting in case of breakage can be performed fully as easily as in any other method of glazing, the only things required for a perfect job being to select a pane that fits closely, and to fill the cracks with white lead. In either of these methods, the glass lies flatly on the sash-bars, and there is no place underneath that must be filled with paint or putty, or left open to allow the entrance of water, and the rotting of the sash-bars.

In regard to the question whether hot water or steam is the better heating method, I concur with Professors Taft and Maynard. For small houses, we would be foolish to monkey with steam, when hot water gives us such a safe, convenient, cheap and easily controllable means of heating. I am not so sure, either, that steam is preferable for large houses, but am rather under the impression that the future belongs to the hot-water method.

The next experiment in which I would like to see the Michigan station horticulturist engaged, is one aimed at settling the query: Where, and for what purposes, bottom heat should be employed, and where, and for what purposes, overhead heating is preferable?

**BLACK LEG OF CATTLE.**—In Bulletin 12 of the Missouri Agricultural College Experiment Station (Columbia, Mo.) may be found a study of this dreadful cattle disease. Black leg is due to parasitic bacteria, or germs which exist in certain

localities, particularly low lands and luxuriant grasses, and which, when in the body of young cattle, grow principally in the tissue between the skin and flesh, and in the muscles, causing the appearance of dark, bloody, gaseous tumors. The characteristic symptoms are fever, lameness and local swellings, or black, muscular tumors with formation of gas thercin. As a rule, the proprietor is surprised, one morning, to find among his herd of cattle his best, fattest calf, or yearling or two-year-old, dead, with body already swelled to enormous proportions. On examination, he finds on the body a local place more enlarged than the rest, and in cutting into it, the flesh is found dark and even black as tar. The hand passed over the skin covering this enlargement causes a crackling or crepitating noise, much as the crumpling of paper in the hand; the knife causes a screeching sound in passing through the mass. These peculiar sounds are due to the gas generated by the germs growing in the tissues. Exposed to the air a little while, the dark and apparently bruised flesh regains its natural red color, more or less, but not its natural condition in full. In the tissues so abnormal at the time, may be found the germs of black leg.

Very few animals recover from an attack, even with the best treatment, when the germs have once caused much disturbance among the organs. The disease runs its course from a few hours to a few days; consequently, medicinal treatment is scarcely practicable, even if there were any remedies capable of positive service as curative agents. The most interesting part of the bulletin; however, is that informing us that cattle can be protected against the infection in the same way as people are prevented from taking the malicious small-pox by vaccination with a modified or protective virus; that is, the germ of the disease so weakened by heat or other processes as to cause fever sufficiently high, but not enough to sicken much, stunt or kill. This vaccine matter can be made into tablets, and will probably be offered for sale or gratis by experiment stations, or the department of agriculture.

The first thing to do in case of black leg, says the bulletin, is to remove at once from the place where the malady started all the stock showing no sign of the disease, and leave the sick ones there. Place the apparently well ones on higher and drier lands, if possible, or in a yard, or open, well-ventilated stable, and feed them dry fodder for a week or so and give them plenty of good, clear water. During that period, if you can procure black leg vaccine properly prepared, inoculate every subject twice; that is, at six or eight days interval.

Any man of ordinary intelligence can safely practice this vaccination. All that is necessary is good virus and a hypodermic syringe. As to medicinal treatments, experiments with mercurial preparations, carbolic acid, mineral acids, iron and copper preparations, sulphurated agents and various antiseptics have failed. The station veterinarian, to satisfy the demands of the people and the claims of manufacturers, has also tried several "sure cures" and "specifics" recommended, but has failed with all. As charbon, a disease of horses, mules, cattle, sheep, etc., is sometimes confounded with black leg, the bulletin also calls attention to the great difference of these two diseases.

**INDIAN CORN AS GRAIN AND FORAGE CROP.**—This subject is treated in Bulletin 11 of the Pennsylvania State College Agricultural Experiment Station. The tests made at the station suggest that for localities as far north as the central and northern sections of the state, and with an altitude of one thousand feet or thereabouts, the smaller Dent varieties should be grown when grain is the chief object. The large Dent varieties should be selected only for ensilage or in some of the southern sections of the state, or in valleys of rich, alluvial soil.

The Queen of the North, Wisconsin Earliest White Dent, Minnesota King, Leaming, Queen of the Prairie and Cleaver corns matured, the Queen of the Prairie giving the largest yield and the Queen of the North and Minnesota King being in best

condition. Golden Beauty, Golden Dent, Hickory King, Champion White Pearl and Piasa Queen did not mature, but proved earlier than the Chester County Mammoth, Mammoth White Surprise and White Giant Normandy.

The varieties grown and sold for ensilage and fodder purposes are preferable when a large yield of forage is desired. In an investigation concerning the composition of corn and its feeding value, fully one half of the dry matter was found in the ears, and one fifth of this in the cob. One fourth to one third of the total amount in the plant is found in the leaves and husks. Of the remaining one fourth there are four or five times as much in the butts as in the tops. This shows the great waste resulting from the practice of feeding the stalks whole. Much of this waste might be saved by cutting the stalks before feeding, or by preserving in silos. It also appeared that fully twenty per cent of dry matter is gained by allowing the crop to mature. All these are valuable suggestions.

#### BLIGHTS IN VEGETABLES.

If we compare the animal and vegetable kingdoms with each other, we observe the close similarity between them, indicating that the life which pervades both is the same kind, though different in degree. The stem and branches of a plant may be compared to the skeleton of an animal, the pith of young trees and shrubs to the spinal marrow; the upward current of sap in the spring, and its descent in summer and autumn, is like the circulation of the blood. The exhalation of oxygen and absorption of carbonic acid in the leaves, which are the lungs of plants, resembles the respiration of animals.

Animals are subject to diseases caused by filthy habits, vitiation of the air, over-crowding or famine; so are plants unhealthy by improper cultivation or unsuitable meteorological conditions. Animal epidemics are supposed to be caused by an animal poison; so the blights of plants are caused by vegetable parasites.

All vegetable blights are caused by different species or forms of one great group of fungi. There are forms, such as those affecting the cereal crops, that are continuously appearing season after season, found more or less in every field. Fungi, as a class, vegetate on decayed substances. They are not, strictly speaking, true parasites, as they are incapable of contending with the vital force of plants when healthy and growing. They require a dead and decomposing matrix. They are incapable of eliminating the elements on which they subsist from living substances.

In most cases, the process of decay must be quite far advanced; the withered leaf or branch must have fallen from the tree and been exposed for a considerable time to the decomposing influence of the weather, before any fungi make their appearance upon it. Though this be the habit of the family generally, there are striking exceptions. There is one group whose peculiarity is to grow only on living plants in the manner of true parasites; they appear on the healthiest and most luxuriant individuals and are never found on dead or decaying substances. The blights that affect cultivated plants are of two groups—those which infest the cereals, and those which infest green crops, whether of the garden or field. Early in spring they are found on the young blades; later in the season they affect the glumes and pollen of the ear. They attack the straw, the leaves and chaff, the flower and the grain. When they appear on the straw they close up the stomata, or breathing pores, which serve for the gaseous and vaporous exhalations of the corn, and thus impart to it a sickly appearance. When occurring on the grain, they alter its substance altogether; the sap which should have produced the nutritions, milky kernels being appropriated by the parasite, and converted in its tissues into dust and ashes, masses of black and poisonous decay.

The genus *Botrytis* belongs to the potato parasite, and contains several species which are exceedingly destructive to the plant. They are the most common and abundant of all fungi. On-

ions, cabbages, turnips, beet root, peas, spinach—almost all the the green crops we raise—suffer severely from this blight.

The fungus which causes the vine epidemic is minute, covering the affected grape like a white cobweb. It makes its appearance as a minute speck on the grape when about the size of a pea. It speedily enlarges and covers the entire surface of the berry, exhausting its superficial juices and crushing it within its embrace. One species luxuriates on the grape; another is concerned in the process of fermentation. This strange vegetable stalactite grows in no other vaults than those devoted to wine. Even when the wine is drawn off into a decanter, a meddling fungus follows it, develops itself first on the cork, and having penetrated its spawn, sends down long, rootlike appendages into the liquor, exhausting it of its rich aroma.

L. G. BUNDER.

#### THE HYBRIDIZATION OF WHEAT.

Within the last ten years considerable attention has been paid to the hybridization or cross-breeding of wheat. By hybridization is meant mingling the life or blood of one variety with that of another; or, in other words, inoculation or grafting. Many kinds of grain and vegetables will readily mix when sown or planted near each other, but this is not the case with wheat. Any one may mix a dozen or more kinds of wheat together and sow them promiscuously on a piece of ground. At harvest time each grain will be found to have produced a head of its own kind, and not once in ten million times will they hybridize or mix. But this does sometimes happen, and in this way have some of our most popular and productive kinds originated, such as Fultz, Clawson, Fulcaster, Valley, Martin, Amber, etc.

It may not be generally known that there are sexual varieties of wheat (male and female), the same as in animals and other plants. To hybridize or cross-breed these different kinds is a very laborious and difficult task, requiring great skill, a perfect knowledge of the habits and sexual habits of the plant, constant care, patience and a long time to accomplish, so as to get results to pay for the time and labor spent. Only a few persons in the United States have ever succeeded in artificially hybridizing or cross-breeding wheat, but in one or two cases the result has been highly satisfactory.

The Hybrid Mediterranean is the offspring of a cross between the Diehl and old-fashioned Mediterranean wheats, and was successfully accomplished by a gentleman living in the state of New York. It combines the best qualities of both its parents, and is a valuable acquisition to our list of hardy and productive varieties.

Owing to the deterioration of the wheat crop in some parts of the British Empire, the Royal Horticultural Society of England offered a large sum for the hybridization of a certain number of varieties of winter wheats, to be crossed with their own and other productive sorts from other parts of the world. This laborious and tedious task was undertaken by Carter & Sons, of England, undoubtedly the largest seed growers in the world. Seven years were required to successfully accomplish this object and to get seed enough to distribute in various sections of the world. But the time and labor has been well spent, as they have produced eleven distinct varieties which are the result of their hybridization. Many of these are remarkably early, valuable and productive sorts, which will undoubtedly, in a few years, completely revolutionize the wheat culture of the world.

On my seed farms in Bucks county, Pa., these eleven new hybridized varieties could be seen the past season, growing side by side, and were admired by hundreds of people, many of whom traveled long distances to see the beautiful and interesting sight.

SAMUEL WILSON.

Bucks county, Pa.

## Living Witnesses

Who testify to the peculiar curative powers of Hood's Sarsaparilla are found all over the country. The remarkable success of Hood's Sarsaparilla is one of the wonders of the day. No preparation ever achieved so great popularity in so short a time. This is due to the fact that it does exactly what we claim it will do. Its cures are never overdrawn; its successes are not exaggerated. If you have never tried it, do so.

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## Our Farm.

## NOTES FROM MY HOME GARDEN.

BY JOSEPH.

**A**HE ANNUAL NUTMEG PLANT.—A number of my friends have responded to my call for report on this "novelty," and some of them were kind enough to forward parts of the plant, also. My thanks are due to all these friends, and herewith extended, with a cordial handshake. The famed Annual nutmeg plant, I am now enabled to announce, is the *Nigella sativa*, or fennel flower, a species of the flower popularly known under the names, Love-in-a-Mist, Devil-in-the-Bush, etc. It has been in cultivation for hundreds, if not for thousands, of years, as a pot herb, and as such is much used, especially by the Latin races (Italians, Spaniards, etc.) In practical value, it is perhaps on par with the average pot herb, above some and below others.

The American cookery makes much less use of the various herbs than is common in Europe. I have in my garden over thirty varieties of herbs, at least I sowed seed of that many. Evidently, the call for the majority of them is not great, and consequently not much pains is taken in keeping fresh seed in stock, for of more than a third of the kinds planted not a seed came up. But our people make next to no use of them, not even of the thyme, the basil, coriander, marjoram, and of many others we do not know their use or purpose. Perhaps it were better if we would use more of the home-grown herbs for seasoning, and less of the black peppers and the strong, prepared mustard. I know that the great quantities of the latter consumed by many people with their meats, etc., are doing great bodily harm to the users. A substance that if put on the outside as a poultice will irritate the skin to the extent of blistering it, can hardly be expected to do otherwise than irritate the inside of the stomach, if put there in quantity. The fact remains that herbs are little used, even if we have them in the garden. I do not think that the Annual nutmeg plant, *alias* fennel flower, would meet a much better fate; and this settles it as to its practical value, so far as I am concerned, I only wonder why Mr. Wilson introduced this plant as "Annual Nutmeg," when he must have known, or should have known, its old common name as well as its botanical name. The nigellas are offered by the leading seedsmen, both as flowers and pot herbs.

**NEW POTATO GROWING INSIDE THE OLD TUBER.**—Specimens of old potatoes kept in the cellar, and containing new tubers inside the old one, have been sent me by friends. When potatoes are kept in the cellar the second summer they usually make some effort at propagation, and this often manifests itself in various and curious ways. Usually, the young, miniature tubers grow on the outside of the mother tuber, like a clutch of chicks crowding around the old hen. Sometimes long sprouts are growing from the old potato towards a window, and little tubers form in the same way as they would if the stems were growing underground. The one tuber sent me showed a rarer and more striking method or attempt at preservation of its kind. One eye, instead of having grown outward from the tuber, had grown into and through it, coming out again at opposite side of point of entrance. The tuber that had set on this sprout, right in the center of the old tuber, had grown sufficiently large (size of large pigeon egg) to burst the old potato, allowing the young one to appear in full sight. Of course, the young potato, if left to itself, would keep until another season, and be in shape for planting and propagation. This is only one instance of the many devices nature employs in an emergency for the preservation of plants, and shows how prolific nature is in her resources, even against heavy odds.

**CELERY GROWING.**—From a number of letters received, I see there is again some demand for information on the subject, and I will have to yield to it, even if found guilty of repetition by older readers. September weather, usually moist with

cool nights, is well suited to the requirements of the crop, and if the ground is as rich and the cultivation as thorough as it should be, if success is to be hoped for, the plants will now be making good growth. But if the season should be dry and hot, and the plants be attacked by leaf blight—which, under such circumstances, is common, and manifests itself by yellowish and brownish spots, euding in the entire decay of the affected leaves—I would not know of anything better to do than to mulch and shade the plants, preferably after the ground has received a thorough soaking. The shading can be done by frames loosely made of lath and placed over the rows on a support of small stakes or posts. Under average conditions this precaution can be dispensed with. As soon as the plants have reached some size and thrift, they are "handled." Cultivate or hoe next to the rows; this will give you the loose earth needed. Then begin on one end of row, take one plant after another, trim off the partially-decayed, small, outside leaves, hold the plant erect with all leaf stalks pressed closely together in one hand, and with the other pack sufficient soil around it to keep it in this position. Afterwards draw up more soil to the plants with the hoe. This finishes the handling, and will answer for the self-bleaching kinds, White Plume, Golden Self-Blanching, etc., even without further attention. Other kinds must afterwards be earthed up, if to be used before winter. The sooner this work is done after the plants have obtained a good and sufficient size, the sooner the celery will be in condition for use. In good growing weather, early in the fall, celery can be bleached in two or three weeks; later, it will require longer. Celery intended for winter storage, however, should not be earthed up and bleached on its summer stand. It will keep better and longer if the blanching is deferred until the plants are put in the storage trenches, or in the regular celery-houses, late in the fall.

There are several ways to proceed in blanching celery for fall and early winter use. One is to pack soil up against the rows from each side, clear up to the upper part of the leaves, so as to form cones of soil, with a row of plants in the center, and only the tops of leaves exposed. This work is usually begun with the plow and finished with the spade. Another method is to enclose each row of plants in boards ten inches wide. First lay one board down on one side of the row, so that the edge will touch the soil packed around the plants in handling; then lay another board on the other side in same way. Then take hold of the outside edge of each board, lifting them up on edge, and bringing the upper edges as close together over the row of plants as the foliage will permit. The boards are then fastened in this position by means of little stakes, by strings tied around them near the ends, or by little slats nailed across them on top. Where boards are handy, this is the most convenient and least laborious method of treating celery. The plants blanch well, and the boards may be used on later celery when the earlier one is ready for market or use and taken up.

The Planet Jr. people (S. L. Allen & Co., of Philadelphia) have introduced an implement for hillling celery. It is an adjustment to the Planet Jr. horse-hoe, and I do not think it is very expensive. I do not happen to have their price list at hand. I have not yet tried nor seen it work. Undoubtedly, some of my friends have this implement in use, and I shall be glad to hear from them in regard to it. The season here has been so dry since July 1st that it was absolutely useless to set celery plants until too late. The dry spell was only broken towards the latter part of August. It is the first season in a long time that I have not been able to grow plenty of celery.

**KOHL RABI.**—Some people like the flavor of a raw as well as cooked turnip just as much as I despise it; but there are few who would not greatly prefer young and tender kohl rabi, either in the raw or cooked state, to turnips. I know I would if I had to eat either. My daughter and some young lady visitors of hers, a few days ago, came across a small basket of kohl rabi bulbs that were being brought

from the garden to the kitchen, and at once proceeded to peel and eat some. "What delightful turnips!" the visitors said, as they kept on munching away. The taste told them that the bulbs belonged to the turnip family, but they had never seen them growing before.

The fact is, that kohl rabi is seldom met with in the gardens of native-born Americans. This is to be wondered at and to be regretted, for this "delightful turnip" is as easily grown as any vegetable in the garden. Sow seed in early spring, and for succession a few weeks later, in drills, as you would turnip seed. It is true, the plants come up small and somewhat feeble, after the manner of turnips, and the flea beetle is apt to make them a call now and then, as they will turnips; but the plants usually outlive the attacks, and with slight attention, soon get strong and grow rapidly. When a few inches high, thin to six or eight inches apart, and soon every plant will form a good bulb. The vegetable is especially calculated for summer and autumn use, but can also be easily kept into the winter. Use while young and tender, peeling away the coarse, outside layer, which, at a more advanced age of the bulb, will become tough and woody. Seed is easily raised and cheap. Home gardeners can well afford to buy an ounce or two and plant for a good supply. The Early Vienna, early, with good bulb and small leaves, also called Imperial, or Improved Imperial, is the kind most usually grown. A purplish sport of this is quite handsome, but otherwise not superior. Large White is much later, with larger leaves and thicker leaf stalks. If I were to grow but one kind, it would be Early Vienna.

## WIRE-WORMS.

I have read a number of articles lately about wire-worms. I will give you my experience with them the past twenty-five years, and tell how I keep them down. Where barn-yard manure is used freely, you will always have a good crop of these worms. I used gas-house lime right after digging my crops. I applied the lime at the rate of one hundred bushels per acre. I broadcasted it over the ground and then cultivated it into the soil. It killed the cut-worms.

I raised sweet potatoes on the same piece of ground for twenty years, and when the wire-worms got to eating the potatoes, I applied the lime right after digging. The worms then are near the surface, and busy hunting for the potatoes that are left in the ground. The lime does no harm at this season, only to the worms. By the time of planting the next crop, the strength is out of it, and no harm to the next crop results from it. This plan worked well with me.

Norwalk, Ohio.

S. GRAY.

## Orchard and Small Fruits.

CONDUCTED BY SAMUEL B. GREEN.

## INQUIRIES ANSWERED

BY SAMUEL B. GREEN.

**Plums.**—M. M., West Manchester, Ohio, writes: (1) "What are the best varieties of plums for the climate of western Ohio, and for market purposes and profit?" (2) When is the best time to plant plum trees—spring or fall? (3) How far apart ought plum trees be planted? (4) Which would be better, one year old or two years, after trees have been budded? (5) In planting one hundred and fifty plum trees, how many of each variety would be most profitable?"

**REPLY:**—(1) Damson, Lombard, Gen. Hard, German Prue. (2) Better plant in the spring, but procure your trees in the fall, heeling them in until spring. (3) Put them twenty feet apart each way. (4) Better have them two years from the bud. (5) Probably the Damson would be the most profitable to plant largely of, as it is freer from the attack of the curculio. Of the others mentioned, it might be well to plant an equal number.

**Scions—Grafting.**—A. B. L., Keosauqua, Iowa, writes: "What time of the year should fruit tree grafts be selected? From what part of the tree should they be selected?—Can plums, pears, peaches, apricots and quinces be grafted together indiscriminately?—Where can I get a cheap book fully describing grafting and budding, and raising all kinds of fruits?"

**REPLY:**—Fruit tree scions ("grafts") should be cut late in the fall, and consist of good, healthy wood of the previous summer's growth. They may be cut from any portion of the tree that made a good growth the preceding year. —No, they cannot. As a rule, stone fruits will graft together, and fruits like apples, quinces and pears will quite readily graft together. However, apples do best on apples and quince on quince, etc., each one on roots

of the same species as the scion.—Perhaps "Thomas' Fruit Culturist" is as good a book as you can get for a general purpose book, but there is no one book giving detailed treatises on all horticultural methods.

**Black Rot on Grapes.**—H. F. C., Goodland, Ind. Your grapes are troubled with what is called black rot. This is a fungus disease that is prevalent throughout the whole grape region. Some varieties are affected more than others. It was found, some years ago, that where the vines were protected from the dew by a strip of cloth stretched over them, they did not rot. This discovery led to the bagging of the grapes, a method that is being very largely adopted by vineyardists all over the country. In order to protect the grapes, the bags should be put on as soon as the blossoms fall. It has also been found that by spraying the vines with what is called Bordeaux mixture, the same result is accomplished; but as this requires some complicated preparations, I generally recommend to those having but few vines, that they put their grapes in bags.

**Planting Blackberries.**—C. C., Niota, Ill. Blackberries may be planted either in the fall or spring, and if the work is well done it will be successful. In fall planting, especial care should be taken to plant deeply and firm solidly. Put two strong plants in each hill, and the hills four feet by seven feet apart.

**Forced Fruiting.**—P. T. P., Sing Sing, N. Y. writes: "I read, quite a good many years ago, that if a stout string or cord be tied (at a certain time of the year) quite tightly around a limb or branch of a fruit tree, which had never borne any fruit, that limb or branch would produce fruit the following season. I have forgotten what time of the year it was to be done, but I think it was some time in August. If you can tell me the right time to tie the strings around the branches to make them fruit next year, please do so. State, also, whether the strings should be tied very tightly, or only moderately."

**REPLY:**—It is well known among horticulturists that whatever tends to check the growth of a tree has also a tendency to make it fruitful. For instance, it is a quite common practice to cut off a part of the roots of pear trees that grow strongly but do not fruit, to make them set fruit. I know of a few apple orchards where the trees were nearly entirely girdled by cutting away the bark with an axe, and this process resulted in forcing the tree to set fruit buds. A piece of string or wire tied around a branch will cut into the wood by the force exerted by the growing wood, and weaken the branch and perhaps cause it to set fruit. If this practice is tried, the string or wire should be put on early in the season (probably by the middle of June). A much better way, however, to accomplish the same purpose is to seed the orchard down to some such crop as grass, which will cause the trees to fruit by crowding the roots and checking their development.

**Grafting Roses—Buffalo Berry.**—G. D. S., Fleetwood, Pa. Roses may be grafted outdoors in a manner similar to apple grafting, in the spring, about when the growth starts, though they do best if the union is put below the surface of the ground. Most of the grafted roses in the market have been grafted in greenhouses during the winter. Many rose's bud easily if tried rather early in the summer. Our American sweet briar makes a good stock for this purpose, and I know of one nursery concern which makes quite a specialty of budding such stocks three feet from the ground to form tree roses. There are various other stocks used, the most common of which, for a stock for perpetual roses, is called Manetti, and is an Italian briar. The Tailby stock is generally used for the tea roses. The buffalo berry may be obtained from the Jewell Nursery Co., of Lake City, Minn., and also through any of the reliable nurseries of the country. I do not recommend it for fruit for any locality where other small fruit can be grown; but in the Dakotas and Montana, where it grows wild, it is highly esteemed for jellies, etc. It forms a small tree, but it is necessary to have the two kinds of trees in order to get any fruit, since the plant is what botanists call dioecious; that is, it has two forms, one of which is the staminate, or male plant, while the other is pistillate, or female. In ordering, therefore, it is necessary to order at least three plants, in order to be sure of having the two forms.

## QUICK WORK.

Twenty minutes for refreshments. More than a minute consumed in getting to the lunch counter, and at least three minutes more gone before you get what you want. That's modern haste for you. If you tell a busy man anything now-a-days you've got to keep on the jump with him and give him the essential points without any fluff and frills. So you will understand why you are invited to skip from one to another of the following points:

Drs. Starkey & Palen's Compound Oxygen Treatment has restored thousands of invalids to health. Thousands gratefully admit it. You may know who have been cured, where all these restored men and women live, and what were the diseases removed, if you will ask Drs. Starkey & Palen for their 200-page book, which will be sent entirely free of charge to any address. For over 20 years the Compound Oxygen Treatment has been doing this good work. And there is every good reason why it should be good and lasting in its results. In the first place, Drs. Starkey & Palen are skillful physicians—in the second place, they are experienced chemists—in the third place, their Compound Oxygen Treatment is blood-food. It is instantly and easily available. Circulation appropriates it and every hungry need has its aliment. Nature responds—you take heart again and best of all—you get well. If you want the names and addresses of those who have already been cured by the use of the Compound Oxygen Treatment, you may have them by return mail if you send your address to DRS. STARKEY & PALEN, No. 1529 Arch St., Philadelphia, Pa., or 120 Sutter St., San Francisco, Cal.



FROM NEW YORK.—The crops in Monroe and Genesee counties have been very good, considering the wet spring and the dry summer. Considering location and prices of farm products, land is as cheap here as anywhere. Wheat is worth 90 cents per bushel; oats, 50 to 55 cents; potatoes, 80 cents. J. M.

Churchville, N. Y.

FROM KANSAS.—Auderson county is in the second tier of counties from the east line, and in the fourth tier from the south line. We have a good country here, rolling and well drained. There are no large streams of water, but plenty of small creeks. There is enough timber for fuel, cordwood selling for \$2.50 to \$3.50 per cord. Crops are not as good as last year, yet we have enough for home consumption. Wheat, oats and flax are fair crops, and corn will go from 10 to 25 bushels to the acre; some localities will do better. Garnett is our county-seat, and has a population of 2,000 to 2,500. We have three railroads running through our county, in different directions. Land sells for from \$10 to \$50 per acre. We have four drug stores, but not one of them has a license to sell whiskey. As to prohibition, I do know that it is not a curse but is one of the best laws we have on our statute-books.

Garnett, Kan. J. O. H.

FROM WEST VIRGINIA.—The soil of Fayette county is generally fertile, and land is worth from \$5 to \$20 per acre. It is well timbered with oak, poplar, hickory, etc. The finest tobacco in the United States is raised here; it frequently brings 75 cents per pound. This is a good sheep country. It does not cost more than 50 cents a year to keep a sheep, as the winters are mild. The land is all underlaid with coal. The population of the county is 20,000, 5,000 of which are miners and their families; consequently, we have a good home market for farm products. There will be shipped from the county this year 5,000,000 feet of poplar lumber, besides large quantities of oak, hickory, walnut, etc. Owing to the drought, corn is not more than half a crop; oats were a failure; wheat was half a crop, and potatoes an average one. The hay crop was the best I ever saw. Our people are law-abiding, and we have plenty of churches and free schools.

F. D. R.

Elliott, W. Va.

FROM GEORGIA.—Walker county lies in the north-western part of Georgia. Lookout mountain raises its point about 1,700 feet above the level of the sea. We have had a very good season, somewhat warmer than usual, but with plenty of rain. Wheat did not turn out as well as was expected, on account of the late spring, but other things, as oats, Irish and sweet potatoes, did well. All kinds of fruit, small and large, grow in abundance. The soil is good and very well adapted to the growing of vegetables, small fruits and melons. Strawberries and tomatoes take the lead and pay very well. Land is high—from \$75 to \$300 per acre, and still on the boom. A few acres is sufficient to make a good living from. The market is close by, and there is sale for everything raised. The famed city of Chattanooga is but four miles from us. The water is very good; the climate is pleasant. We need more good, honest and industrious men to till those ridges and help supply the demand for produce of all kinds. There is room for many more with small capital and a will to work. Dairying pays well; milk is 10 cents per quart and butter 25 cents per pound. Chicken raising is also a profitable business.

Poerille, Tenn. W. W.

FROM NORTHERN CALIFORNIA.—Tehama county is crossed by the fortieth parallel of north latitude. It extends from the summit of the Sierra Nevada mountains on the east, across the Sacramento valley to the summit of the Coast Range mountains on the west, and has an area of 2,000,000 acres of land. The central portion, consisting of valley and foothills, is mostly used for grain growing, but is specially adapted to vineyards and orchards. Mr. Hatch, the greatest fruit grower in the state, has recently purchased \$50,000 worth of land in the northern part of the county, to be devoted to fruit. United States Senator Stanford owns 55,000 acres in this county, of which 4,000 acres are in grapes, being the largest vineyard in the world. The fruits that thrive here are peaches, prunes, plums, pears, apples, apricots, figs, olives, quinces, nectarines, blackberries, strawberries, currants. The nuts are almonds, walnuts, chestnuts and pecans. There are also numerous orange trees in different parts of the county that do well, but it has not been fully demonstrated that orange culture will be a success. It is a notable fact that fruits ripen earlier than in the counties south of us. In the mountains there have been found many traces of gold, silver, coal, petroleum, iron, copper and sulphur. There are also large forests of pine, fir and oak. Saw-mills turn out 30,000,000 feet of lumber annually. The climate is as good as can be asked. A few days at this season of the year are unpleasantly warm, but no sunstrokes are ever known. About the first of October the

rains will begin to fall, and then for ten months the climate will be perfection. In the valley there will be no snow; there will be about twenty-five inches of rainfall, and the lowest temperature will probably be about 24° above zero.

M. G.  
Cottonwood, Cal.

FROM OREGON.—People are more familiar with western than eastern Oregon. We have a drier climate here than there. Last year, however, was the first in which the crops came near being a failure from drought. Our soil is very fertile. Excellent crops of cereals and vegetables are raised. It is believed that the world cannot beat us in raising fine-flavored apples, pears, peaches, prunes, plums, etc. We have only lately found out the possibilities of our locality, and only a few know that we can raise fruit as successfully as on land that costs elsewhere several hundred dollars per acre. Land can be bought very cheaply here—for \$10 to \$20 per acre. Our winters are short and not very severe. It is not uncommon, however, for the mercury to fall to 16 degrees below zero, for a few days each winter. Great numbers of little flowers appear before the snow is all gone. The Dalles is a live city of 5,000 inhabitants. It is expected to flourish greatly when the government completes the locks on the Columbia river, at the cascades, a few miles below the city. Above the city, the government will soon begin the construction of a ship railway around the dalles (the trough) of the Columbia. It is a shame these improvements were not made years ago, but monopolies prevented. Much good is expected from the granges, alliances, etc., now being organized here.

W. W. A.  
The Dalles, Oregon.

FROM MISSOURI.—Lincoln county is one of the principal wheat growing sections of the state, and produces a good grade of wheat. The Mississippi bottom is very productive, and is especially adapted to corn and wheat. Timbered land ranges from \$10 to \$25 per acre, and land in cultivation from \$25 to \$75. This has been a very unfavorable season for all kinds of crops. Wheat looked fine up to March, and then the wet weather and freezing killed a greater part of the low land wheat. The oat crop was an entire failure, caused by an oat louse, which also injured the wheat and corn to some extent. Corn is injured by a drought which has been existing ever since the middle of June, and which hurt all kinds of vegetables. The potato crop will be short; they are now worth \$1.25 per bushel. Cabbages are worth 10 cents a head; butter sells for 20 cents per pound; eggs, 12½ cents a dozen; oats, 40 cents per bushel; corn, 50 cents; wheat, \$1; and hay from \$10 to \$12 per ton. Lincoln county has a hog law, and I think it would be a good thing if we could have the whole stock law. It would keep a great many diseases from spreading that are so common among stock of all kinds. The Farmers' and Laborers' Union is exciting considerable interest in Missouri. Most of the farmers and laborers are joining it, and the organization now numbers about 60,000 members in Missouri.

Winfield, Mo. W. S. N.

FROM VIRGINIA.—Farmville is a town of about 2,500 people, situated on the south bank of the Appomattox river, in the county of Prince Edward. It is about sixty-five miles from Richmond. It is on the main line of the Norfolk and Western railroad, one of the largest roads in the South. Farmville is located in a region of the state known to be about the best for producing the rich, heavy, dark shipping tobacco, and is one of the best—if not the best—markets in the state for the sale of unprized shipping tobacco. The principal products raised around here are tobacco, corn, wheat, oats, etc. The religious, social and educational advantages of the place are excellent. The four leading denominations have good churches, and their pulpits are generally supplied with men of talent and ability. The state normal school for females is located here, and offers unusual advantages to young ladies; we have good public schools, too. The place is noted for its healthfulness; it is getting to be much of a health resort. Within a quarter of a mile of the corporate limits of the town are the widely known Farmville Lithia Springs, the fine waters of which are shipped far and wide over this country; they have the reputation of being the strongest lithia in America. An extensive business is done by a company in bottling and shipping this water, which is for sale by druggists throughout the country. We have the following manufacturing establishments located here: The South Side Canning Company, for canning all kinds of vegetables, and it is doing a large business; the soil of this and sister counties is well adapted to the successful growth of fruits and vegetables, and this place may become a great canning center. The Farmville Manufacturing Company manufacture plows, plow beams, handles and castings, wood molding, etc. The Farmville Mills make flour of nearly all grades, and corn meal; these mills are doing an extensive business. For manufacturing, there is no doubt about this being a very good place in every respect. Our railroad facilities are good. The Farmville and Powhatan railroad runs through a first-class agricultural country and timber

lands; the O. K. (Orange and Keysville) railroad also runs through good farming and timber lands, and it is said that there is "right much" iron and coal along the route, also. The Farmville Coal and Iron Company has just been formed here, and has purchased land adjoining town for building-lots, and is going ahead to further develop the country around here. I write this with a view of trying to induce settlers to come to our immediate neighborhood. All I want to do is, to call attention to our place and let them find out for themselves what it is. We want good citizens to engage in manufacturing enterprises here. It ought to be a good manufacturing point, and as for manufacturing tobacco, it seems to me it ought to be the best place in the state. We want good farmers, also.

Farmville, Va.

R. H. P.

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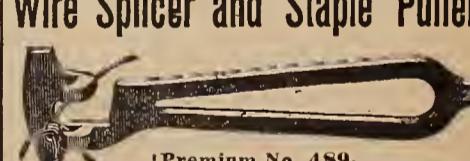
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## Our Fireside.

## A BALLAD OF DREAMLAND.

I hid my head in a nest of roses,  
Out of the sun's way, hidden apart;  
In a softer bed than the soft, white snow's is,  
Under the roses I hid my heart.  
Why would it sleep not? Why would it start  
When never a leaf of the rose-tree stirred?  
What made sleep flutter his wings and part?  
Only the song of a secret bird.  
Lie still, I said, for the wind's wing closes,  
And mild leaves muffle the keen sun's dart;  
Lie still, for the wind on the warm sea dozes,  
And the wind is unquieter yet than thou art.  
Does a thought in thee still as a thorn's wound  
smart?  
Does the fang still fret thee of hope deferred?  
What bids the lips of thy sleep depart?  
Only the song of a secret bird.

The green land's name that a charm encloses,  
It never was writ in the traveler's chart,  
And sweet as the fruit on its tree that grows is,  
It never was sold in the merchant's mart.  
The swallows of dreams through its dim fields dart,  
And sleep's are the tunes in its tree tops heard;  
No hound's note wakens the wildwood hart,  
Only the song of a secret bird.

ENVOI.

In the world of dreams I have chosen my part,  
To sleep for a season and hear no word  
Of true love's truth or of light love's art,  
Only the song of a secret bird.

—Swinburne's New Volume.

## Susy's Uncle Sam.

BY MARY A. DENNISON.

**U**NCLE Sam Brooks came home from a long walk on his fiftieth birthday. He rubbed his eyes as he entered the parlor. Half a dozen nieces crowded about him, some of whom he had not seen for years. Pretty Susy Brooks, the youngest, he had never met before, as her life, till within a year, had been passed in a western city.

"So you've been getting up a surprise for me, children," he said, laughing. "A surprise at my time of life is like making a new acquaintance—it takes time to get used to it. But I'm 'real pleased,' as the children say."

"It was your sister Pussy's plan, my dear," said his old mother. "She said you hadn't had a party since you were five years old, and now, as you were fifty, you should have another."

It was a merry gathering. The cousins were all healthy, happy-looking girls, but one of them, Susy, was really beautiful—a gentle, dreamy-looking girl, whose large, blue eyes seemed to see things invisible.

Uncle Sam had a keen eye for beauty. He had, also, a large stock of common sense, and as he chatted with pretty Susy he studied her closely.

"I am told you write poetry in secret," he said, smiling benevolently.

"Oh, Uncle Sam! Who told you?" she asked, crimsoning, and drawing back a little.

He smiled again, amused at her consciousness.

"Your face," he said. "It tells tales out of school, little girl."

"Then you really don't know whether I do or not," she made answer, "and I shan't tell you."

"But you do; you write poetry, and it isn't very good, either."

She stared at him. He was very rude, she thought.

"Don't misunderstand me," he said. "Your lines have the faults of youth and inexperience. If you can summon courage enough to endure a long and hard apprenticeship, you will perhaps succeed in the end. Your ambition is boundless, but you are too sensitive for reproof, and too delicate for hard work."

"I can wait," she made reply. "I am sure, in time I shall find my place."

He did not quite understand the light in her lovely eyes. Was it the consciousness of genius, or mere vanity?

"With that conviction," he said, "you ought to be happy."

"I have nothing else to make me happy," was her quick reply. "I live with my Aunt Esther, who does not understand me. Nothing that I do seems to please her, or, rather, everything I do displeases her. She is so very strict."

"Then she don't care for poetry?" he said, smiling. He knew the Aunt Esther with whom, on the death of her parents, she had come to live.

"Oh, no; she don't even like to hear me sing or recite."

"Poor little girl!" he said, with real pity in his face. "How much better you would enjoy life in such a home as this, for instance. I can even fancy you in a tie apron, such as my sister wears, milking our pet Bessy, one of the dearest little cows in all the country round."

Susy shuddered perceptibly.

"Oh, dear, no," she said; "anything but a quiet, country life. I want to be among people, in crowds. I should like to win the world's applause. To do some great thing has always been my ambition."

Uncle Sam smiled, but this time sadly, with a mild little shake of the head.

"I was only thinking how delightful it would be to hear you singing with the birds," he said, after a big pause; "to see you grow rosy and healthy."

Susy was on the point of replying, when her cousin Gertrude came up.

"You ought to hear Susy recite, Uncle Sam," she said. "She will, if you ask her. Susy, give us, 'Curfew Shall Not Ring To-night.'"

"No, indeed," said Susy with decision.

"Can't we ring it out of you?" asked Uncle Sam, much amused at her manner. "Well, you needn't if you don't wish to. I don't care so much about hearing girls recite; I mean, of course, the average girl, and 'Curfew' has been rung and swung to death."

"Horrid man!" Susy said to herself. "So he don't like recitations. I'll make him change his mind."

Presently the neighbors began coming in, and the room was soon full. Later on, Susy was surrounded and coaxed for just one recitation. Everybody was quietly waiting.

"I'll show Uncle Sam," she said, mentally, as she took her stand by the center-table and recited one of Whittier's poems.

All the room applauded. Another was called for, and another. Uncle Sam listened with interest.

"Isn't she splendid?" one of the cousins asked of him.

"Very fairly done," he said, quietly.

"Fairly?" was the response. "Why, it is wonderful. We all idolize Susy. She would grace any position. If it wasn't for that

company and the efforts of those who have so delightfully entertained us."

Susy stood on air. "That was a compliment to me," she said to herself.

"And now," said Uncle Sam, "I wish to drink to all your healths in pure, sparkling water. Heaven keep you all lovers of home, sweet home." May no unholy ambition tempt you to leave its sacred shelter. Sir Walter Scott never said a truer thing than this: 'Ambition breaks the ties of blood, and forgets the obligations of gratitude.' And grand old Jeremy Taylor proclaims that 'ambition is the most troublesome and vexatious passion that can afflict the souls of men.' For me," he added, "give me the sweet pleasure of surrounding myself with those I love, and the privilege of making happiness for others. That is the height of my ambition."

It was now nearly a month after the birthday party. The cousins had long ago returned to their respective homes. Uncle Sam sat by his mother's side reading the morning paper, when the postman's knock sounded. Several letters came, but only one of them absorbed all his attention. It read as follows:

DEAR UNCLE SAM:—Susy has disappeared. We don't any of us know where she has gone, and as you may suppose, we are all very much alarmed. She was so pretty and inexperienced. Her aunt says they had some words, and Susy ran away to join the 'actor folks.' Furthermore, she informed us that she would never take her back if she came on her hands and knees. What shall we do? We can get no tidings of her whereabouts. Can't you advise something? She seemed to think so much of you. I know you liked her—everybody did. She has been gone ten days, and we have so hoped she would come to us. We have hunted everywhere, but what can girls do? Please answer at once.

Uncle Sam put the letter in his pocket and went out to walk and think it over. Everywhere he seemed to see the sweet, flower-like face of his brother's child. "Will she throw

"I will go at once," he said. And as he walked through the narrow, muddy streets, he learned that Susy, driven by the want of money and friends, had accepted an inferior position as a dancer at this small theatre, and at the end of the first act had fainted.

"I believe it was sheer mortification, she was so sensitive and delicate, and she was too proud to let her wants be known, or to apply to her relations. But she is getting well, now, though she has been very near to death's door."

They reached the tenement house where these kind people lived, and after mounting a great many stairs, the girl opened a door into a large room. Uncle Sam's glance fell upon a woman near the small stove, who was making bread, and whose face and manner gave evidence that she had seen better days. The floor was white and clean, and home-made mats gave it an air of attractiveness. Through many windows the light came softly, and over all was the grace of neatness.

"Mother," said the girl, as the matron wiped her hands and untied the strings of her cotton apron, "some one has come to see our sick friend."

"I'm very glad, indeed," the woman said, looking smilingly into Uncle Sam's face as she came forward. "We have done the best we could for her. The poor child has been a great sufferer, but she is on the mend, I am glad to say."

"All owing to your kindness and care, no doubt," said Uncle Sam, as he followed her into a room where, upon a narrow cot, lay pretty Susy, her features so pinched, so wan and white, her closed eyes so hollow, that for a second Uncle Sam thought she was dead. As he bent over her, she opened her eyes, and an expression of rapture came into their blue depths.

"I dreamed it! I dreamed you came for me!" she said, with a quick sob, the tears brimming her eyes. "Oh, Uncle Sam, it is so good to see you! But you will none of you ever care for me again, because I ran away." Her thin hands went up to her face. "I thought I was doing right," she said. "Aunt Esther called me hard names, and said I was an expense to her. I did think of coming out to you, but when you were so kind as to offer me a home, I refused, and I couldn't ask you to take me after that. Then I made up my mind to sell my diamond ring—my mother's ring—and I had been saving a little money that I earned by knitting lace."

She was sobbing, now, bitterly.

"Hush, my child," said Uncle Sam, pityingly; "don't talk about it now; you are too weak."

"Oh, but I must, I must, though I can't tell all. How dreadful it was when my money was all spent, and I couldn't get anything to do! I couldn't go back to my aunt, because she had threatened to turn me away if I did. So what could I do? Then I tried the theatres for a small place—anything that I had the health to do—and they didn't want me, only at this last one, and there—oh, Uncle Sam!" Her voice choked. She caught his hand and held it with all her strength, which was but small, while she struggled with her sobs, as she managed to say: "Then I wanted to die."

"She came pretty near it, poor, little thing!" said the woman, pitifully.

"Yes, and I wish I had."

"Hush, hush," said Uncle Sam, with a break in his voice. "It's all over now, my dear," he went on, swallowing a great lump in his throat, "and you have had your experience. Now I have come after you. Do you remember the old country home, the birds, the fields, the blue sky? Only say the word, and you shall be as a daughter to me. You shall write and sing and live outdoors and get well. But remember, no more stage business. What did I tell you, little one?"

"Oh, Uncle Sam, only take me with you! It will be like heaven, now. I will never despise the humblest home again. Whatever you advise me I will do, if only I can stay with you."

"Then it is all settled," said Uncle Sam, with moist eyes. "You didn't know I was breaking my heart for you to come, but I wouldn't urge you. Willing service or none."

Uncle Sam had something to do with his pocket-book before he left that night. It came with him plump with bank notes, but when Susy and he returned together a few days afterward, there was only a little more than enough left to pay their fare home. The poor, little dancer and her widowed mother had cause to remember Uncle Sam for months afterward.

The old farm-house is a pleasant place to live in now, for pretty Susy graces it like a little queen. Singing, working, reading, writing, doing her own sweet will all the day long, she is very happy.

Uncle Sam, who is a loving but judicious critic, has already helped her to literary fame, and her pretty stories and poems are read at many a fireside. The woodbine over the trellis, and the roses about the door, the dumb creatures inside the house and out, are alike the recipients of her care and attention.

And they are not all. There is somebody



cranky aunt of hers she would go on the stage."

"And fail," said Uncle Sam.

"Oh, I see, you are like Susy's aunt, and think that sort of thing desperately wicked," she said.

"By no means. It is one of the most arduous of all the professions. But that child, with her frail physique and sensitive soul, why, it would be death to her. That's what I mean." And he stalked away.

"Well, I'm glad he don't think it's wicked," the girl said, following his retreating figure. "Poor, little Susy! Everything seems against her."

Yet Susy had praise and attention enough to satisfy any amateur, only she longed to know what Uncle Sam thought. Had she electrified him?

Not long after that they were all called out to supper. At the table, no one was so handsome, vivacious and witty as Uncle Sam. An enormous cake was brought on, lighted by fifty tiny candles.

"All the way from the cradle to the grave—of my last birthday," said Uncle Sam. "I wonder if they signify that I am light-headed? Light-hearted I certainly am, thanks to this good

her life away?" he muttered to himself; "that life that might be made so useful?"

At once he decided what to do. The managers of various theatrical companies were interviewed that week by a tall, grave man, who questioned them persistently, so persistently that one or two of them very nearly ordered him out; but for some days he found no clue to the missing girl. One morning, as he was leaving the dingy back entrance of a second-class theatre, the last one on his list, a hand was laid timidly on his arm. He turned to confront a thin, colorless face, and a figure wrapped in a dingy waterproof, for it was raining.

"I think you asked the manager about a young lady whom you thought had lately joined this company," she said.

"Yes, I did," was his response, "but like all the rest, he knew nothing about it."

"Oh, they never trouble themselves to remember; I don't know as they could, so many are coming and going all the time. But I guessed at once that you were looking after Alice Leonti. That is only her stage name," she added, as he was about to speak; "her real name is Susy Brooks, and she ran away from home. I am so glad if she belongs to you. She was so pretty and so young, I couldn't bear to have her sent to the hospital when she was taken sick, so she stayed with us, and my mother has nursed her. Perhaps you will go and see her now. I am on my way home. We don't live in a very nice place, because we are poor, but if you don't mind—"

The old farm-house is a pleasant place to live in now, for pretty Susy graces it like a little queen. Singing, working, reading, writing, doing her own sweet will all the day long, she is very happy.

Uncle Sam, who is a loving but judicious

who is getting in the habit of stopping for a chat with Susy—somebody with brown eyes that flash suddenly with love-light at the sight of her smile. Uncle Sam calls him "that young fellow" a little contemptuously, but still he smiles on everything and every one whom Susy likes. "That young fellow" is very busy during the day, on a snug little farm of his own, left him by his father, which, instead of selling and wandering into the city to spend his money, he has determined to make a means of livelihood.

Uncle Sam says "that young fellow's" head is level, when he hears him talk of following out sundry methods in order to make his land profitable, and as the little homestead is only half a mile away, and the young fellow has two good horses on his farm, Uncle Sam thinks, with a sort of melancholy interest, that Susy won't be so very far away after all; it will only be a short walk, and he is fond of walking. He laughed to himself not a little, one day, when on lifting some paper all scribbled over, and expecting to read one of Susy's poetical effusions, the first thing that met his eyes was:

"**FOR CUP CAKE.**—One cup of butter, two cups of sugar, three cups of flour and four eggs." And all the way down, recipe after recipe followed, all copied from the old family cook-book.

"So that's the poetry she's busy on now," he said to himself, laughing, "the poetry of common sense and good living! Well, well," he soliloquized, "that's much more sensible and a great deal pleasanter than to be a third-rate actress at a second-class theatre."

That evening he went out to the gate where the young farmer stood, talking to Susy, and scanned him well. He noted a face of remarkable strength, fine, brown eyes that looked steadily into his, a firm mouth, good color, well-knit limbs, and a physique of blended strength and beauty.

"Won't you walk in?" he asked, with a smile such as only Uncle Sam can give when he is pleased, and Susy knew from that moment that Uncle Sam had taken "that young fellow" into favor.

So he had; and the little birds on every hedge and tree fly not more willingly and merrily than Susy's pretty fingers, as she sits making up a goodly store of household furnishings for the pretty rooms in the old-fashioned cottage waiting for her.

And every time Uncle Sam comes in to sit down for a chat, to read the newspaper, or to watch her as she sews, her happy heart goes out to him in the tenderest love, as she whispers:

"God bless Uncle Sam!"

#### AVOIDING POISON VINES.

There need be no trouble in identifying the poison ivy in any of its forms. The hairy trunk will often serve us, but there are two other features which are of much more value. First, let us remember that its leaves are always grouped in threes, whatever the outlines of their more or less wavy margins. In some sections the plant is always called the "three-leaved ivy."

Four things need to be committed to memory, says *Harper's Young People*, to insure safety against our poison sumachs:

1. The three-leaved ivy is dangerous.
2. The five-leaved ivy is harmless.
3. The poison sumachs have white berries.
4. No red-berried sumach is poisonous.

Both the poison ivy and the poison sumach, though unlike in appearance of foliage, have similar white berries growing in small, slender clusters from the axils of the leaves. In all other sumachs the berries are red, and in close bunches at the ends of the branches, and, far from being dangerous, yield a frosty-looking acid which is most agreeable to the taste and wholesome withal. With these precepts fixed in the mind, no one need fear the dangers of thickets.

#### ORANGE BLOSSOMS.

The custom of wearing orange blossoms at weddings is of comparatively recent date with us. It came to us, like most other female fashions in dress, from the French, who in turn had derived it from Spain. In the latter country it had long obtained, and is said to have been originally of Moorish origin. There is, however, an old Spanish legend which gives a different account of its introduction. According to this, soon after the importation of the orange tree by the Moors, one of the Spanish kings had a specimen of which he was very proud, and of which the French ambassador was extremely desirous to obtain an offshoot.

The gardener's daughter was aware of this, and in order to provide herself with the necessary dowry to enable her to marry her lover, she obtained a slip, which she sold to the ambassador at a high price. On the occasion of her wedding, in recognition of her gratitude to the plant which had procured her happiness, she bound in her hair a wreath of orange blossoms, and thus inaugurated a fashion which has become universal.

As the orange was introduced into Spain at a very early period, by the Moors, this legend sufficiently establishes the antiquity of the custom as far as that country is concerned, although many centuries elapsed before it

spread over the rest of Europe. Up to forty or fifty years ago it was the practice for ladies to be married in hats or bonnets; and the fashion of dispensing with the bonnet seems first to have established itself after the example set by Queen Victoria on the occasion of her wedding in 1840.

"Her dress," says the *Annual Register*, "was a rich, white satin, trimmed with orange flowers, and on her head she wore a wreath of the same blossoms, over which, but not so as to conceal her face, a beautiful veil of Honiton lace was thrown."

For some years after this, however, bonnets were still often worn at weddings, the orange flower wreath, natural or artificial, being placed on them, and not directly on the head. It is probably not more than thirty years ago that they were finally dispensed with, and the wreath and veil substituted. Even in Germany, the time-honored chaplet of myrtle, to which there are so many allusions in literature and poetry, has now been discarded in favor of orange flowers, and there seems little reason to doubt that this custom, now universal, and pretty and appropriate in itself, will continue to be followed for a long time to come.

#### HISTORY OF A WELL-KNOWN SONG.

How many of the myriads who in childhood have sung, "There is a happy land, far, far away," knew anything of its writer? His name is Andrew Young, and he is now eighty years of age, still mentally and physically vigorous, and retaining, in all its early freshness, his sympathy with children. The hymn was composed in 1838. The tune to which it is married is an old Indian air, which blended with the music of the woods in the primeval forest long before Sunday-schools were thought of. The hymn was composed for the melody. Its bright and strongly-marked phrases struck Mr. Young's musical ear the first time he heard it casually played in the drawing-room. He asked for it again and again. It haunted him. Being accustomed to relieve the clamor of his thoughts and feelings in rhyme, words naturally followed, and so the hymn was created. It got into print. It has been translated into nineteen different languages. And yet the author has never received, and, indeed, has never been offered a penny in remuneration.

#### HOW TO SAVE DOCTORS' BILLS.

Never go to bed with damp or cold feet. Never lean with the back upon anything that is cold.

Never begin a journey until the breakfast has been eaten.

Never take warm drinks and then immediately go out in the cold.

After exercise of any kind never ride in an open carriage or near the window of a car for a moment; it is dangerous to health, or even life.

Never omit regular bathing, for unless the skin is in good condition the cold will close the pores and favor congestion or other diseases.

Never stand still in cold weather, especially after having taken a slight degree of exercise, and always avoid standing on ice or snow where the person is exposed to the wind.

When going from a warm atmosphere into a cooler one, keep the mouth almost closed, so that the air may be warmed by its passage through the nose ere it reaches the lungs.

Keep the back, especially between the shoulder-blades, well covered; also the chest well protected. In sleeping in a cold room, establish the habit of breathing through the nose, and never with the mouth open.

#### WOMEN SHOULD HEED.

Here is something I got from my family physician which I really think every woman should know: Women who sit with their legs crossed to sew or to read, or to hold the baby, are not aware that they are inviting serious physical ailments, but it is true, nevertheless. When a man crosses his legs he places the ankle of one limb across the knee of the other, and rests it lightly there. A woman, more modest and restricted in her movements, rests the entire weight of one limb on the upper part of the other, and this pressure upon the sensitive nerves and cords, if indulged in for continued lengths of time, as is often done by ladies who sew or embroider, will produce disease. Sciatica, neuralgia and other serious troubles frequently result from this simple cause. The muscles and nerves in the upper portion of a woman's legs are extremely sensitive, and much of her whole physical structure can become deranged if they are overtaxed in the manner referred to.—*Courier-Journal*.

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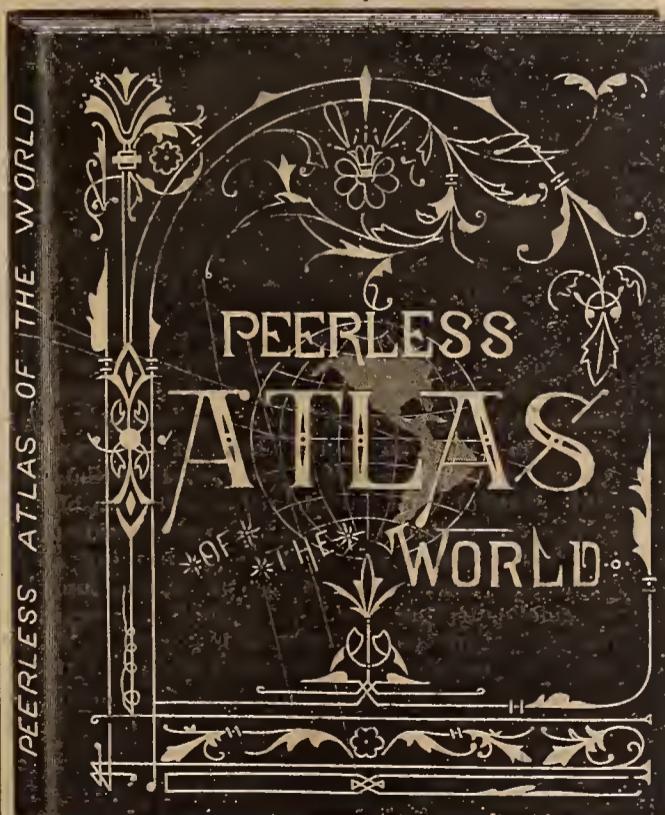
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## Our Household.

## THE TALE OF A CHICKEN BONE.

She sat in the car on the seat ahead;  
Her hair was wavy, and almost red;  
Her voice had a dulcet tone;  
Her face was lovely, her look was bland,  
She held in her pretty and slender hand  
A savory chicken bone.

Her teeth were perfect and white as milk,  
Her lashes long and as soft as silk,  
And her eyes with splendor shone;  
Beautiful, jolly and full of fun,  
With laugh, with giggle and girlish pun,  
She nibbled her chicken bone.

She shook her head and tossed her chin;  
She twisted her red tongue out and in;  
She pouted her lips, so sweet;  
She tilted upward her pretty nose;  
She showed the stripes on her brilliant hose,  
And patted the floor with her feet.

Greasy and brown on her finger tips,  
She brought the bone to her lovely lips,  
With a sly glance sideward thrown  
At a youth who looked at her while she  
lunched,  
Who sat and sighed while she munched and  
munched

The meat from her chicken bone.

Awkward and shy, of a rustic mold,  
With a scanty mustache of flaxen gold,  
He spoke in a piping tone.  
He'd a longing look and a languid air;  
He whispered low with a wistful stare,  
"I wish I's a chicken bone!"

I broadly smiled at the odd conceit—  
A novel subject to cook and eat,  
To munch with a maiden's jaw;  
To be spitted and done to a royal brown,  
To be nipped, to be gnawed and then swal-  
lowed down,

Like corn in a chicken's craw.

He heaved a couple of dismal sighs,  
With his very soul in his yearning eyes,  
As she upward gazed at him.  
With a laugh and a toss of her thoughtless  
head,  
"What a silly goose you are," she said,  
"I've promised to marry Jim!"

O gay coquette of the auburn hair!  
O yearning youth of the wistful stare!  
You will greet my gaze no more.  
There's many a love that is never told;  
There are millions yet to be sadly sold  
By the flirts whom they adore.

—Eugene J. Hall.

## CHATS WITH THE HOUSEKEEPER.

IT SEEMED one year that the "genus homo" in our family bid fair to run short on pies, for the want of more variety of material. Having a great many Clinton grapes, which are small and with very large seeds, and a great many elderberries, we tried combining them, cooking them together until the grape seeds rose to the surface, then skimming them off; I added sugar to sweeten and then set aside in a stone jar to use. Not caring to use it too frequently so as to tire of them, we canned some of it and used it later in the winter. I have heard people say that to make a good elderberry pie it requires enough other good material to make a pie, and the elderberries are only put in for the name, but I think when they are combined with a sour fruit like the grape, the flavor is very pleasant.

CRABAPPLE JELLY—Is one of the prettiest jellies we have, and can only be made in the fall. Try to get your apples before they are quite ripe. Wash them, cut them in half; if good and sound, leave the core and seeds in, put on with just enough cold water to cover them well. When done, pour into a funnel-shaped bag of cheese-cloth, doubled, and hang up to drip. It is better to do this way, as in pressing it through so much pulp comes through. To the drips add sugar in equal amount to your liquid. Stir good while cold, but never stir jelly after it has begun to boil. It should boil hard for twenty minutes. I always succeed best when I use a large-bottomed pan and make only a small quantity at a time.

Perhaps you are tired of my way of making pickles, so I will give you a new one sent in by one of our subscribers, which you may all try. I shall, for a change.

CUCUMBER PICKLES.—Place your cucumbers in liquid half vinegar and half water; let stand for three days, then scald in the same for half an hour. Have ready this proportion of covering if you have a goodly number of pickles: Three gallons of vinegar, one

half pound of white mustard seed, two tablespoonfuls of pulverized alum, one cup of salt, one handful of whole cloves, the same of stick cinnamon, ten small peppers and a dozen pieces of horseradish. Take the cucumbers out of the hot vinegar and put them into this, cold. Place a weight and cover over the top to keep them under.

RIPE TOMATO PICKLES.—Pare ripe, sound tomatoes, but do not scald them. Place in a jar. Tie whole spices in a cloth and bring to a boil in vinegar and pour it over them.

CHRISTIE IRVING.

## CUT WORK.

In our illustration we give a very pretty pattern of ornamentation to be used for the bottom of white aprons or children's white dresses. The pattern is easily marked with a spool. Underneath the goods is basted coarse Brussels net; the oval places are then cut straight through the middle with the scissors, and the edges turned in and neatly hemmed down on the lace. Nainsook on fine, India linen is the best material to use. Finish the edge with a deep or narrow hem, as preferred, and on the edge of this sew torchon lace, as it seems to correspond best with the trimming. It can be used, also, for underwear, if the material is fine.

L. L. C.

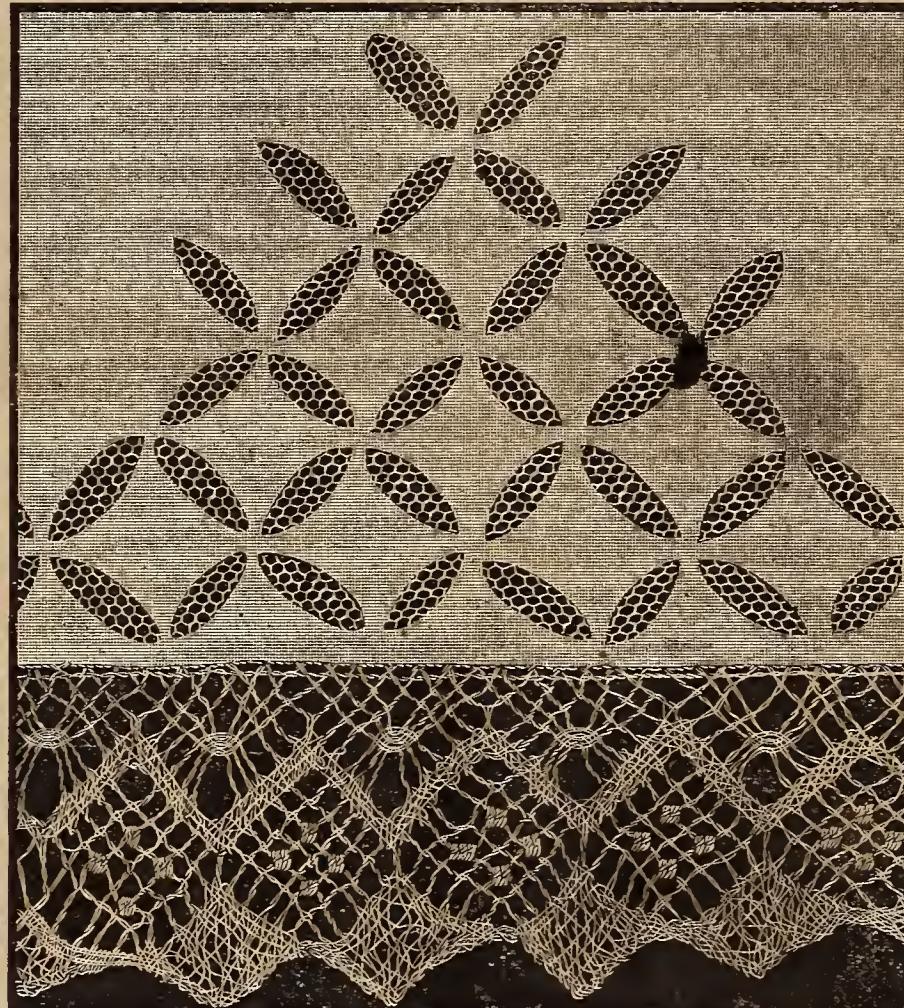
## HOME TOPICS.

A CLEANING MIXTURE.—It is convenient to have something in the kitchen, ready to use at any moment, for removing stains

is scarce, yet watermelons are plenty, and a nice, sweet pickle can be made of the rinds—that part which is usually thrown away. Pare off the green skin, cutting the rinds into any shape desired, and then let them lie in a weak brine until the next morning; then put them in a preserving-kettle, in clear water, and boil them until you can pierce them with a broom splint. Let them drain in a colander while you make a sirup in the proportion of two pounds of sugar, one quart of vinegar, half an ounce of mace, an ounce of stick cinnamon and one ounce of green ginger roots. Boil this until it is a thick sirup; put the drained melon into glass jars, pour in the hot sirup and seal the jars.

NAMING CHILDREN.—A few days ago several people were talking of names. One of them, a gentleman connected with the work of the present census, said that it seemed to him the shorter and more insignificant the surname was, the longer and more high-sounding a name was given by the parents. He mentioned such names as Alexander Hamilton Butts, Claudius Algernon Potts, Cleopatra Geraldine Hodge. From this the talk went on, and each one told of odd or ridiculous names. One that was mentioned was May I. Pinch; another, Carrie A. Gunn; and of initials there were R. U. Green, C. A. Wolff and B. A. Goslin, with many others I do not now remember.

It really seems as if there were enough good, honest, Christian names without calling a little, dimpled darling Cleopatra



CUT WORK.

from silver and cleaning nickel-plated or brass articles. A simple and good mixture is made as follows: Take half a cup of whiting, fill the cup up with water, put it in a bottle and add an ounce of ammonia. Shake it well before using. A flannel cloth moistened with this will remove the discoloration made by eggs on silver spoons or forks, with so little trouble that they will not be neglected. It will also remove the brown smoke stains from lamp chimneys, and make them as clear and bright as crystal.

CHEESE-CAKE PIE.—Fruit is so scarce this year that it puzzles the cook to find a variety of good, inexpensive desserts. Perhaps the following recipe will help some one: Take a teacupful and a half of cottage cheese, add two tablespoonfuls of cream, either sweet or sour, and rub it through a colander; add two eggs, well beaten, half a teacupful of sugar, and the juice and grated rind of a lemon, if you have it, or flavor with nutmeg or lemon extract.

If you do not use the lemon you will not need so much sugar. Stir all together until it is smooth. Make a good paste, line a pie-dish with it, fill it with the pie, and bake about half an hour.

WATERMELON PICKLES.—Although fruit

or Baadicea or Lucius Quintus Curtius, and yet we hear just such names, or worse ones. Besides choosing a pretty sounding name, we can see by the examples given that one should think of the way the names will fit together, of the initials, and of what the nickname will probably be. Children are very apt to get a nickname at school, and if there is anything about their name that can be made a fund for teasing, it will be discovered. I heard of one boy whose initials were H. O. T. At school he was immediately dubbed "Hot," and this name clung to him into manhood. Parents should think of all these things, and not give a child a name that is outlandish just because it is a family name. The sooner some names become obsolete the better.

MAIDA MCL.

## WHITE WORMS.

Franz Bollman, Wall Lake, Iowa, writes: "My wife says her pot plants are being killed by little, white worms which lurk in the earth about the roots, and she wishes to know how to get rid of them."

ANSWER.—Stir into the surface soil a liberal dressing of flowers of sulphur, and water occasionally with tobacco tea. This will act as a fertilizer upon the plants and rid the earth of the worms.

## IN EXPERIENCE'S SCHOOL.

"Experience is a dear schoolmaster, but fools won't learn in any other," used to be a favorite quotation of my mother's. Now, I have learned some useful lessons—not all of them especially costly ones, but many that, perhaps, might be useful to my sister housekeepers—in the years that I have had the care and management of household affairs, and to record a few of these lessons for the benefit of others will be the aim in this article.

Some of these points I did intend to note down earlier in the season and forward to the editor, so that they might be more seasonable for the present summer, but illness prevented me from doing so. However, they may be in time to be utilized by some of your readers this year, and will certainly keep until another season.

First, a point in regard to soap making, that is not too late to be practically applied the present fall. A writer in a recent number of FARM AND FIRESIDE advocated the home manufacture of the supply of soap for the family, and I think her suggestions were excellent, but I would here add another item to the directions she gave, which will be found a great aid in the annual soap making. It has been a great help to me since I adopted this plan of management, as all anxiety as to the proper keeping of the grease gathered during the season is thereby relieved and much time gained in getting the soap "to come," for since I practiced this method, less than half the boiling formerly required answers as well, and, in fact, I believe—though I have not tried that plan—that where the lye used for keeping the grease is of extra strength, as I have had on some occasions, no boiling at all is really essential, but that the addition of more lye and the boiling water stirred in, would bring soap at once.

The plan is to have good, strong lye stored in some suitable vessel. A stone jar serves an excellent purpose for this use, and whenever you have any grease you wish to save for soap, place it in this jar of lye, taking care to stir it occasionally, so the grease may all be thoroughly saturated with lye; then, when ready for soap making in the fall or another spring, you will find your grease free from mould and insects, which is often not the case when stored in the ordinary manner. Then, too, the action of this strong lye upon the grease has been such as to have already greatly advanced the operation of soap making, and the saving in time alone would much more than compensate for the trouble, if, indeed, it is any extra trouble saving it in this manner.

Where the lye at the end of soap making is of sufficient strength to nearly or quite bear up an egg, it is all that is required for keeping grease; but, at any rate, it is little trouble to set up a leach and run off enough lye for this use, and a few quarts of good lye, stored in some convenient receptacle, is with us often found quite useful.

This leads me to another subject I had intended to touch upon in this article, but I find I must condense, or I shall extend it to too great length. This is the use of clear lye for cleansing such articles as fruit-cans, stone jars for butter and preserves, and, in fact, many other things which will suggest themselves to the careful housekeeper if she has a dish or dishes of lye on hand for use when needed. For this purpose the lye need not necessarily be as strong as that used for grease. It is my practice to store several quarts of lye, after making soap each year, in empty fruit-cans, and then, previous to putting up my annual supply of canned fruits, vegetables, etc., fill each can, separately, full or nearly full of this lye, being sure every part of the can and cover is wet with it. When thoroughly rinsed, such cans are then absolutely clean and sweet, and by the use of perfect rubbers and properly sealing them, no loss of canned fruit is in any way a necessity.

I heard an old housekeeper say she could not safely use old fruit-cans more than three or four years, even with new rubbers, as the sauce would spoil in them, but if entirely clean there is certainly no reason why old cans are not as good as new ones, and that they can be easily

made perfectly sweet and clean in this way, I know from actual experience of many years. Perhaps if this should meet the favor of the editor, I may be able in a future article to give a few more pointers from my experience that will interest FARM AND FIRESIDE readers.

AUNT MARY.

A USEFUL SUGGESTION.

Anna A. Cameron, in the *Homemaker*, gives the following useful hint, which our housekeepers may like to try during the pickling season:

"No matter what pains I took to keep my pickles under the brine, up they would come like so many rebellious corks, get waterlogged and have to be thrown away.

"I am of a practical turn of mind, and like to think out modes of escape from some of the small snares that beset a housekeeper; but the pickle problem remained unsolved until a summer when cucumbers were very scarce, and one looked on their destruction with anything but equanimity.

"The keg in which I had put them in brine was smaller at the top than anywhere else, hence I could only get a small, circular board in it, too small in circumference to prevent the cucumbers from escaping from under it. As I beheld the inflated objects, time after time, encircling the outer rim of the board, and knew that one after another they would all be ruined, suddenly a solution of the difficulty presented itself to me in the shape of a thin, white cotton bag that lay near.

"I put all the survivors into the bag, tied a string down close to them, and plunged bag and all beneath the brine, with board and rock accompaniment, bidding 'a long good-night' to further difficulty respecting pickles in brine.

"I put up a quantity of pepper mangoes every year, and the peppers were as irrepressible as life-preservers. They could not be induced to stay under the brine, but the bag reduces them to order, and nothing need spoil, from the 'tiniest Tim' up the whole list of things pickled."

CANNED MILK AND PACKED BUTTER FOR WINTER USE.

Where the supply of good milk cows is limited on a farm, it invariably happens that there comes a time during the year, usually during the winter months, when that farmer's family is without milk. Those who have never had any experience of this kind can form no idea of the inconvenience it occasions, and only where the family is accustomed to the use of cream in coffee and tea is the real deprivation felt.

However, the good housewife has it within her power to supply her table with cream, if she will only take the trouble and begin her preparations early enough; not in the form of condensed milk from the factories, but in the shape of canned milk of her own preparing. She should provide herself with a good supply of self-sealing quart jars. Fill the jars with new milk, the richer the better, and screw on the covers closely, then wrap them in several folds of cloth and place in a vessel of cold water. Let the water come up to the covers of the jars. Place the vessel over the fire and let the water boil half an hour. After the milk is cool, remove the jars to a cool, dark place. It will keep an almost indefinite length of time and be relished equally with fresh milk.

Late September and October is the best time to make butter that is to be put by for winter use. As the fall pasture is then in its prime, the butter produced at this time is much sweeter than that made earlier. (Reference is here had to Indiana, Illinois, Ohio, etc., in which sections the killing, black frosts do not usually appear until November.) There are various ways of packing butter, each one possessing some good points, providing the season is favorable to its keeping, as very much depends on the weather, we have long since learned. The following method we consider the most likely to prove successful for preserving September butter:

The butter is first thoroughly washed, then it is salted to suit the taste of the housewife, with the best dairy salt obtainable; it is then pressed well—we think working destroys, in a measure, the fine quality of the butter—and allowed to

stand six or more hours, after which it is pressed again. It is then made into small balls or rolls of about a pound each. Each roll is wrapped in thin, bleached cheese-cloth. A new stone jar is procured—this may be of a size that suits you best, we prefer the three-gallon size; it is first thoroughly rubbed with damp salt, and a thin layer of salt is put in the bottom, then the butter is packed in. When the jar is nearly full it is filled with strong brine. A little sugar added to the brine will improve the butter. If the butter seems inclined to float, which is not likely to occur, a plate should be placed over it to act as a weight to suppress its floating tendencies.

We have found that butter made during the early winter months will keep perfectly for weeks in rolls. It is first thoroughly pressed, then molded into large rolls and wrapped in one thickness of cheese-cloth that has been previously wet and rolled in salt. It is then put on dinner-plates and stored away in a room where there is never any fire, and in which the atmosphere is always pure. When the intentions are to make butter to keep, the milk should always be strained in a room in which the atmosphere is perfectly pure. It is impossible to produce sweet butter from milk set in a cellar containing vegetables, for, as every intelligent farmer's wife knows, milk readily absorbs all kinds of gases to a greater or less extent, and butter as readily absorbs gases as does milk, hence the importance of keeping it in a cool, pure atmosphere. Perhaps if more attention was paid to the place of storing packed butter away, merchants and customers would find less to make them object to it than they now do.

ELZA RENAN.

WHIPPED CREAM.

Some farmers think this is a dish only for aristocrats. Mistaken, my friend; it is not any more expensive than the natural cream that so many use on the table every day. It is a delicious sauce for many kinds of pudding, and for cake that is becoming dry. It makes a dainty dish for convalescents in some diseases, if used with crackers, one that relishes, tastes good, and more than anything else, it looks so tempting and dainty, and looks is everything to an invalid's appetite; please always bear that idea in your mind when waiting on the sick.

In making whipped cream, be sure and cool the cream below churning temperature (which ranges from 64° to 70° Fahrenheit), or you may get a dish of butter on hand, and the cooler, the quicker it becomes thick; only don't freeze it, of course. To a coffee-cup of cream add the whites of two eggs, two tablespoonfuls of sugar and a little flavoring extract. Beat all together; a regular egg-beater will do the work the most rapidly. This quantity will make a quart bowlful, after it is beaten so as to stand alone when dropped from off a spoon. The cream should be rather thick and perfectly sweet. So you see you have a quart out of a cupful by using the whites of only two eggs with the cream, and eggs should be plenty in every farmer's family.

GYPSY.

Pansies are so beautiful it is no wonder they are loved and almost worshiped by many people. It often seems as though my pansies know how much I love them, for they are always a success with me, and I can always find pansies in bloom from the time the snow melts in March until Christmas time. My first pansies were obtained from a florist, and they were so pretty I not only saved and sowed all the seeds that season, but I sent to other seedsmen for seeds, and as often as a new variety was offered I sent for it, and now I have a very fine collection of this lovely flower.

My pansy-bed this summer is fifty feet square, and contains every color and combination of colors ever seen in this lovely flower. There are the Trimardeans, Odiers, Belgian, German, English, French, Highland and Butterfly pansies; also black, white, blue, red, yellow, purple, mahogany, violet, brown, bronze, fawn and rex; also tiger or sunray or rainbow pansies. The tiger pansies are quite new and rare. I sow pansy seed in September,

and the little plants will bloom until covered with snow, and early in spring they will be a mass of bloom. The thermometer is often 30° below zero here, so if pansies will live here they will grow almost anywhere. In a milder climate they will bloom nearly all winter. I have often picked pansies from under the snow.

The Maiden Hair fern grows wild here, and they are lovely for window plants in winter. I always have several pots and boxes of this loveliest of all ferns growing among my plants in winter. Last winter I had several pots of ornithogalum, the great Arabian Star of Bethlehem. The flowers are a waxy white, size of a 25-cent silver piece, and are borne in clusters from six to eight inches across. My flowers were so much admired by visitors I shall try this lovely flower again this winter. The bulb is very hardy, and has lived in the cemetery here two winters. So it is equally as good for garden as window culture.

CHATTA BELLA.

PLANTAIN LEAVES.

Many of our readers have sent in different uses for plantain leaves, some recommending them for snake bites, bruises, burns, and also to use in inflammation of the bowels, bruising them and laying them upon the bowels. The uses of many of the herbs around us is fast dying out, but it is a pity that more is not known of the uses of the remedies near at hand. A great many of our native plants are of great medicinal benefit; to some of our grandmothers we are indebted for the knowledge of the use of them.

TO SAVE TIME AND STRENGTH ON WASHDAY.

DEAR SISTERS OF THE HOUSEHOLD:—For some time I have been an interested reader of the FARM AND FIRESIDE, and have often thought of writing a few lines to the "Household," to tell the sisters how much I enjoy reading their letters, but, for fear of that dreadful wastebasket, have never quite had the courage to do so. But, I guess I will try, anyway.

I am a young housekeeper (just sixteen), but may be my mite will help some other young housekeeper.

I want to tell you of a way to save time and strength on washday. I got a new kind of soap and followed the printed directions on the wrapper, and am much pleased with the result.

The directions are as follows: For the washing of a small family, take one half of a bar, or pound, cut into shavings and dissolve in one gallon of hot water; put the clothes in a tub containing about ten gallons of warm water, pour in the dissolved soap, stir thoroughly, let them soak thirty or forty minutes, wring out and rinse in warm water once and cold water twice; a very dirty wristband or grease spots may require a slight rubbing, but otherwise the clothes will come out clean and white without rubbing or boiling. The clothes should be soaked over night in cold water.

By following the above directions, I got my washing out much earlier than usual, saved myself a great deal of labor, and my clothes are as white and clean as if I had spent a great deal of time rubbing and boiling them.

But my letter is getting rather lengthy, so I must close.

JENNIE R.

Iola, Illinois.

MY MITE.

I have profited so much by the writings of the sisters of the "Household," I think I ought to add my mite to the treasury of good things. I want to tell you what a useful thing a bunch of feathers is. When dressing a chicken, save the large feathers of the wings, tie them in a bunch and you will find many ways to use them. They are just what you want to brush crumbs from the cupboards and shelves; to help you in blacking the stove, as they will reach all corners where the brush won't reach, and are much nicer than a rag on a stick, as I have seen used. When you have a boiled dinner and have a greasy kettle to wash, just put some soap in the kettle and set it on the stove to heat, then rub the soap on the inside with the feathers, and how nicely it is cleaned without putting your hands in.

I have a wall-pocket, made of shirting, tacked on the wall by the stove, in which I keep the bunches of feathers. I have several pockets, so I can keep the clean feathers from those used for the stove.

I want to say a word in favor of the wire dish-cloth. It is the best thing I know of to clean fruit-cans. Just put in

some soapsuds and the wire cloth and shake good, and see for yourself how it will do its work.

How I love the fancy-work department, and how well I would like to have such work in my home. I think we cannot do too much for our homes, but whatever we do let it be something that will be a help and a comfort to some one or all of the family. For my part I would not have a room in my house that was so nice that my children or husband dare not enter. I want my children to feel that my house is their home, and I think parents make a great mistake when they keep the best in the house for company. Mothers, do you know that when you are more respectful to your guest than you are to your child, that you are driving your child from your confidence and love? Don't put that very nice tidy on the chair—rather use one that will wash; then there will be no harm done, if one of the boys does happen to sit down there to rest a minute.

Mothers with babies that are teething, if baby has diarrhea, just take half a teaspoonful of pulverized rhubarb, and put it in a teacup (I get it at the drug store, one ounce will last a long time); then steep a handful of peppermint or spearmint in a teacupful of water, strain off and add to the rhubarb, add one half teaspoonful saleratus and sugar to make quite sweet, then give a teaspoonful every hour, if baby's bowels are bad. It is the best medicine I know of for children. A teaspoonful of the mint essence will do as well as the herb, if you have it, and a few tablespoonfuls of brandy added to the sirup is very good. If essence of peppermint or spearmint is used, take one half teacupful of boiling water, and put on the rhubarb, then add essence and other ingredients. It is a good medicine for any one for bowel trouble, and ought to be kept in the house so it can be prepared any time.

M. A. M.

North Eaton, Ohio.

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## Our Sunday Afternoon.

## QUIET WAYS ARE BEST.

What's the use of worrying,  
Of hurrying,  
And scurrying,  
Everybody flurrying,  
And breaking up their rest?  
When every one is teaching us,  
Preaching and beseeching us,  
To settle down and end the fuss,  
For quiet ways are best.  
The rain that trickles down in showers  
A blessing brings to thirsty flowers;  
Sweet fragrance from each brimming cup  
The gentle zephyrs gather up.

There's rain in the tempest's path;  
There's ruin in a voice of wrath;  
And they alone are blest  
Who early learn to dominate  
Themselves, their violence abate,  
And prove, by their serene estate,  
That quiet ways are best.

Nothing's gained by worrying,  
By hurrying,  
And scurrying.  
With fretting and with flurrying  
The temper's often lost;

And in pursuit of some small prize  
We rush ahead and are not wise,  
And find the unwanted exercise  
A fearful price has cost.

'Tis better far to join the throng  
That do their duty right along;  
Reluctant they to raise a fuss,  
Or make themselves ridiculous.  
Calm and serene in heart and nerve,  
Their strength is always in reserve,  
And nobly stands each test;  
And every day and all about,  
By scenes within and scenes without,  
We can discern, with ne'er a doubt,  
That quiet ways are best.

—*Evangelist.*

## PUSH.

**I**f there was more push in the world, there would be fewer hungry, half-clothed, homeless, suffering children; fewer broken-down, dissipated men and women; less need of alms-houses, houses of correction and homes for the friendless.

Push means a lift for a neighbor in trouble. Push means a lift for yourself out of the slough of despondency and shiftlessness—out of trouble, real and fancied. Push never hurts anybody. The harder the push the better, if it is given in the right direction. Always push uphill—few people need a push downhill. Don't be afraid of your muscles and sinews; they were given you to use. Don't be afraid of your hands; they were meant for service. Don't be afraid of what your companion may say. Don't be afraid of your conscience; it will never reproach you for a good deed. Push with all your heart, might and soul, whenever you see anything or anybody that will be better for a good, long, strong, determined push.

**P**ush! It is just the word for the grand, clear morning of life; it is just the word for strong arms and young hearts; it is just the word for a world that is full of work, as this is. If anybody is in trouble, and you see it, don't stand back, push!

If there is anything good being done in any place where you happen to be, push!

## AN EXPLODED (?) BOOK.

The Bible is a book which has been refuted, demolished, overthrown and exploded more times than any other book you ever heard of. Every little while somebody starts up and upsets this book; and it is like upsetting a solid cube of granite. It is just as big one way as the other, and when you have upset it, it is right side up, and when you overturn it again it is right side up still. Every little while somebody blows up the Bible; but when it comes down it always lights on its feet, and runs faster than ever through the world. They overthrew the Bible a century ago, in Voltaire's time; entirely demolished the whole thing. In less than a hundred years, said Voltaire, Christianity will have been swept from existence, and will have passed into history. Infidelity ran riot through France, red-handed and impious. A century has passed away. Voltaire has "passed into history," and not very respectable history, either; but the Bible still lives. Thomas Payne demolished the Bible, and finished it off finally; but after he dropped into a drunkard's grave, in 1809, the book took

such a leap that since that time more than twenty times as many bibles have been made and scattered through the world as ever were before since the creation of man.

Up to the year 1800, from four to six million copies of the Scriptures, in some thirty different languages, comprised all that had been produced since the world began. Eighty years later, in 1880, the statistics of eighty different bible societies which are now in existence, with their unnumbered agencies and auxiliaries, reported more than 165,000,000 bibles, testaments and portions of scripture, with 206 new translations of bibles or portions of the Bible distributed by bible societies alone since 1804; to say nothing of the unknown millions of bibles and testaments which have been issued and circulated by private publishers throughout the world. For a book that has been exploded so many times, this book still shows signs of considerable life.

## TIME AND THE HOUR.

"Time and tide wait for no man" is one of the oldest proverbs in the English language. But the word "tide" in the proverb does not mean the ebb and flow of the ocean; it is used in the proverb in its original meaning—time, not, however, as a mere synonym of time, but a time, an allotment of time, an occasion. In his book on "Words and Their Uses," published about twenty years ago, Richard Grant White made this plain. The word in Middle English was long used for hour; its use in this sense continued to a very late period, and in Shakespeare we read: "Time and the hour runs through the roughest day." In this passage "time and the hour" is merely an equivalent of time and tide—the time and tide that wait for no man. The ebb and flow of the sea came to be called the tide because it takes place at regular intervals or fixed times. We have the original sense of "tide" preserved in such words as "eventide," "yuletide," "Christmastide," etc. Chaucer has "mealtide." The verb "betide" was formed from the word tide employed in its original sense. Thus "Woe betide you!" meant, "May there be an occasion of woe to you." All this is very curious as illustrating the familiar English proverb as to "time and tide," and also as explaining the origin of the term as applied to the ebb and flow of the ocean.

## THE SUPERIORITY OF WOMAN.

Woman's spiritual superiority over man is no poet's fancy. It is an absolute fact. She possesses keener discrimination between right and wrong. Her judgment is the moral criterion to which he submits his deeds. If she approve, his conscience is quiet; if she disapprove, he is ill at ease. That is why a woman who blunts her moral perceptions and allows herself to be dragged down from her spiritual throne is so powerful an instrument of evil. Therein lies the truth of the old saying that there is no great good or great evil in the world which does not have a woman at the bottom of it. And underneath all history of nations and men lies the unwritten history of the home. "The progress of truth," says Emerson, "will make every house a shrine," and truth is never so effective as when it is embodied in a woman.

## THE BEST THING TO GIVE.

Here is a short sermon by a woman, though not preached from a pulpit. It is a good one, and is pretty sure to hit your own case somewhere, whatever may be your age and circumstances: "The best thing to give to your enemy is forgiveness; to an opponent, tolerance; to a friend, your heart; to your child, a good example; to your father, deference; to your mother, conduct that will make her proud of you; to yourself, respect; to all men, charity."—*The Interior.*

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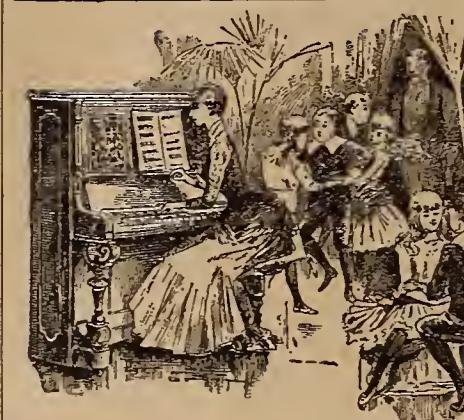
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References: { National Bank of Republic.

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## Our Farm.

THE POULTRY YARD.  
Conducted by P. H. Jacobs, Hammonton, New Jersey.

## VENTILATION AND MANAGEMENT.

**T**HE essentials to the health and management of poultry are very few and simple—pure air and shelter from wind, rain and sun are all that is required after they are divided up properly to accommodate the space of ground given them. Pure air means proper cleanliness, with proper ventilation, and ventilation does not mean a hole cut through the roof, or a box-shaped funnel running through the roof and down within a foot or so of the floor, for pure air. Keep things clean, open the hen-house daily, and in winter close up tight at night, as plenty of fresh air will steal in when the mercury comes down to zero. Good shelter implies a retreat that is dry underfoot, and also above, and open to light and air, or the fowls will not resort to it. Large and expensive houses are neither necessary nor desirable, and any one can build a poultry-house that is at all accustomed to the use of tools. A poultry-house should not be more than large enough to comfortably accommodate the number required. For a cock and twelve hens, ten feet square is ample. Our houses are ten feet square, and accommodate one male and eight female "Single-comb Brown Leghorns." Our white Plymouth Rocks are mated one male and seven females. It would be safe to add three or four more females with both pens, but we prefer to mate as above, as I am sure of fertile eggs. This season, my young Leghorns have fairly popped out. I frequently get thirteen and fifteen chicks from as many eggs. Our mode of incubation is with the old hen. Incubators are good where early broilers are wanted for market, but, in raising thoroughbreds, I prefer the hen, and we keep a number of good setters for this purpose, as Leghorns are non-setters. Every nest is placed upon the ground, and every hen gets the best of attention, plenty of whole corn, and pure, fresh water before her constantly, with a five-minute run in the morning. Every hen is lifted off her nest and all eggs examined, and if any are broken they are washed in warm water, a new nest made, and the eggs returned. A little tedious work, I admit, but it pays. B. A. F.

## A DISCOVERY FOR ROUP.

As we have sent out the remedy mentioned before—*spongia* 15—to quite a number to try, we have received the most encouraging replies in favor of it as a remedy for that scourge of poultry—roup. It is a homoeopathic remedy, and either the pellets or the mother tincture may be used, twenty pellets, or five drops, to a pint of water as a preventive, or double quantity in the water as a cure. Simply keep the water before the fowls, and give no other drink. The drinking vessels must be scrupulously clean, being scalded twice a week, and if the water is soft, so much the better. It can be procured from any homoeopathic druggist, or, perhaps, from any drug store. If any of our readers should give it a trial, we will be pleased to hear from them. It is not an expensive remedy, and need not be used until the disease appears, when the sick fowls should be separated from the others, and all of them be treated, only, as stated, the dose should be doubled for the sick ones. So far it has given satisfaction, though its cures were affected in the summer, and if it proves as efficacious in the winter, it will be a remarkable and valuable discovery.

## GUARD YOUR FLOCKS.

While the warm days are still here, it is an easy matter to bring disease in the flock. Before you buy a hen from a neighbor, be sure your neighbor's flock is not affected by lice, and always make it a rule to quarantine any fowl that you propose adding to your flock, no matter from what source it may be obtained. New blood, whether through a male or hen,

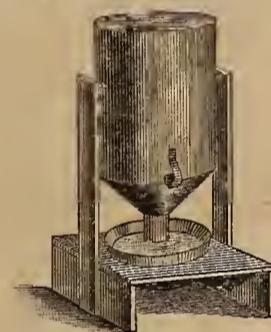
may mean to you something more than you expected to receive. Cholera, roup and lice are carried from one point to another when birds are distributed from different yards, and it is this difficulty that has over and over again broken up the hopes of many who were sanguine. Cattle are protected, by sanitary regulations, from disease, but no laws seem to exist to prevent the spread of diseases among fowls, while poultrymen are really more careless than they should be in that respect. It is a duty on each to guard his own flock, and this he should do by raising all his hens, for the man who expects to venture into the keeping of large numbers, and who buys his hens, runs a risk at the very beginning, which may result in disaster.

## EGGS AND PRICES.

No matter how fresh the eggs may be that you send to market, the reliable merchant, if you are unknown to him, will "candle" them; that is, he will test them by looking through the eggs in a dark place, at a strong light, and should he find only one egg that is stale, your whole lot will be graded accordingly. Nothing is so affected by suspicion as an egg, and the only way to secure the highest prices is to disarm all suspicion by shipping no eggs to market except such as are known by you to be strictly fresh. Once let the merchant discover that he can depend on you, and you will have no difficulty in securing even more than the regular price, for strictly fresh eggs are salable at all times, and at special prices for choice lots.

## A SWINGING WATER-FOUNTAIN.

This may be made of tin, galvanized iron, or a jug or tin oil-can may be used. An upright frame, of wood or tin, may be constructed, similar to the one shown in the illustration. Any tinner can make it. The water in the drinking-pan will be supplied from the can, which has a handle for turning the can up to be filled. Simply fill the can, and let it drop in position, and it will supply water only as the water is diminished from the drinking-pan.



## CAPONIZING.

We have received several letters on the above subject, but as the method cannot well be explained without the use of numerous illustrations, it would be of no advantage for us to attempt to teach our readers in regard thereto, as practice is necessary to meet with success. Young cockerels are castrated when three months old, and we have seen them undergo the operation when only eight weeks old. When done by a skillful performer, there is nothing cruel or dangerous about it, but when attempted by some inexperienced persons, it is cruel in the extreme. To become proficient, one should take practical lessons from one who is an expert, though it may be possible for some to learn from illustrated books.

## CHOLERA IN FLOCKS.

If the cholera appears, it will come again in the future unless every trace of it is destroyed. All dead fowls should be burned, or buried deep, with quicklime well used around the bodies when burying them. Every portion of the poultry-house, as well as every square inch of space in the yards, should be disinfected. The disinfection should be performed two or three times, so as to omit no space whatever. A cheap method is to use thin whitewash, adding an ounce of sulphate of copper (bluestone) dissolved in hot water, to each gallon of whitewash, and then adding an ounce of crude carbolic acid. It may be sprinkled from a watering pot.

## PACKING FOWLS FOR SHIPMENT.

In preparing dressed poultry for shipment to market, use only clean boxes or barrels, boxes preferred. Any size will

answer, but the boxes should be strong. Bore a few holes in the sides, in order to allow the air to enter the box, and be sure that all the animal heat is removed from the carcasses by placing them in ice-water for a few hours, wiping each carcass dry with a clean towel. Lay them neatly in the box, using no straw, wrapping cloth, or packing material whatever, and ship by express, first making all your preparations with the merchant before you begin to kill and dress the fowls.

## UTILIZING WEEDS.

We believe that there can be a saving in food by utilizing weeds. A farmer who keeps a large number of ducks confined in yards, collects purslane (sometimes called "pursley"), and cuts it with a fodder-cutter into half-inch lengths, which he feeds to his ducks. Now he fears his crop of purslane may fall short, as he can use all that grows on his place, while formerly he was aiming to get rid of the persistent weed. Ducks and geese are fond of purslane, pigweed and other undesirable vegetation, and if cut up for them, nothing will be wasted.

## AUGUST AND SEPTEMBER.

You must expect prices to be low for the two months mentioned, with a prospect of low prices in October also, as many will be shipping their hens to market that begin to moult, and which, thereby, cease laying; but prices sometimes go up in November. Much will depend on the weather and the temperature of the atmosphere to regulate shipments, the far western stock being crowded to market in the summer, dressed, in refrigerator cars.

## THE HOME MARKET.

Do not overlook the fact that at this season, when poultry sells low, you have a very good market at home, on your own table. The farmer is the proper one to enjoy the luxuries of the farm, and makes a mistake when he sells poultry at a low sum, and buys beef at a greater cost. The home markets are large, and if supplied as they should be, would not leave as large a surplus to be disposed of as many suppose, while prices would be higher for that which is sold off the farm.

## KEEP IT ON HAND.

Mix one tablespoonful of spirits turpentine with one pint of cotton-seed oil, sweet oil, lard oil, or any kind of mild oil (no kerosene), and place it in a bottle ready for use. Whenever you see a fowl or chick appear droopy and sleepy, apply a few drops on the skin of the head and neck, also comb and face. Use the point of a sewing-machine oil-can for that purpose, and you will kill the large lice, which will be found are the enemies that are doing the harm.

## BURNING SULPHUR FOR LICE.

Sulphur fumes are destructive to lice, and to all other forms of life. If sulphur is burned in a poultry-house, it will avail nothing unless the house is made as nearly air-tight as possible. First, close all cracks, holes or entrances, touch a match to the sulphur (first pouring a little alcohol around it, to assist in the burning), get outside quickly, shut the door, and leave the house closed for two hours, when the process should be repeated.

## TONICS FOR MOULTING HENS.

A teaspoonful of tincture of iron in the drinking water (about a gallon of water) will be all that is necessary to invigorate the hens that are shedding their feathers, but such hens must be fed on nutritious food. The hens that are moulted now will make the winter layers, and should receive extra care.

## THE POULTRY-HOUSE.

In summer, plenty of air should circulate in the poultry-house. Do not crowd the hens, as they give off heat from their bodies, and raise the temperature to a high degree. During the daytime leave all the doors and windows open, so as to keep the house from absorbing heat as much as possible, and also be careful that lice are not present.

**HOME STUDY.** Book-KEEPING, BUSINESS Forms, Penmanship, Arithmetic, Short-hand, etc., thoroughly taught by MAIL. Circulars free. **BRYANT & STRATTON'S** 449 Main St. Buffalo, N.Y.

## INQUIRIES ANSWERED.

**Hens not Laying.**—M. L. C., Kutterville, Idaho, writes: "I wish to know why hens go on their nests, do not lay, and in a few days begin to pass a white, mucous-like substance. They are of the Dorking and Dominique breeds, and their feed is wheat. They are fed regularly, and have access to plenty of fresh water."

**REPLY:**—Your hens are overfed, and are in a fat condition. Keep them on a range, allowing them no grain at all.

**Moulted Hens.**—D. S., Cardington, Ohio, writes: "What is the best thing to do for hens which are moulted, and what to do bring them around as soon as possible to a laying condition?"

**REPLY:**—When hens are moulted, they will not finish the process until the natural period of time, about three months. Feed them on nourishing food, allowing a tablespoonful of linseed meal daily.

**Breeds of Geese.**—E. J. J., Blain, Nevada, writes: "Which breed of geese is the best for laying and for market purposes, with a short description of the best? I have some on hand now. The ganders are white, and the geese are gray and white. I don't know what breed they are."

**REPLY:**—Your geese are only of the common kinds. The Embden is considered one of the best breeds for all purposes. They are pure white—male and female of the same color—and grow to a very large size.

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## Queries.

## READ THIS NOTICE.

Questions from regular subscribers of FARM AND FIRESIDE, and relating to matters of general interest, will be answered in these columns free of charge. Querists desiring immediate replies, or asking information upon matters of personal interest only, should enclose stamps for return postage. The full name and post-office address of the inquirer should accompany each query, in order that we may answer by mail if necessary. Queries must be received at least two WEEKS before the date of the issue in which the answer is expected. Queries should not be written on paper containing matters of business, and should be written on one side of the paper only.

**House Plans.**—C. F. A., Orworth, Kan. For house plans and specifications, send to R. W. Shoppell, New York.

**What is Tankage?**—This query comes to us from a Pennsylvania subscriber. Tankage is the name given to the fertilizer prepared from the refuse of slaughter-houses by certain processes.

**Timothy and Alsike Clover.**—J. S. D., New Lisbon, Wis. Sow the timothy in the fall and the clover in the spring. Alsike clover and timothy make an excellent mixture for hay or pasture. Neither will do well on bottom land that is too wet. Alsike does best in a moist, sandy and clay loam.

**Rye for Hogs.**—W. S. B., Mendon, Ohio, writes: "Will some reader please tell me how to get the best results from feeding rye to fattening hogs?"

**REPLY:**—Grind the rye and make into slop, and let the hogs run on good pasture. If there is a better way, let us have it.

**Ginseng.**—Mrs. E. B. R., Marystown, Tex., writes: "In your reply to C. J. J. you state that ginseng has little value as a medicine. There you are mistaken. The tea made from boiling the root is one of the very best remedies for hemorrhage we have ever known. It does not matter what produces the hemorrhage, whether it is bleeding at the nose or from a cut or otherwise, a decoction of the roots will stop the flow of the blood."

**Black Peas for Manure.**—Mrs. G. F. W., Deep Creek, Va., asks: "Are black peas good for green manure, and if so, when should they be plowed under?"

**REPLY BY JOSEPH:**—They are a most excellent means of improving worn-out soil, at the South, and of the same value in this respect that clover has further North, or is conceded to lupines in sandy soils in Europe. Plow the crop under after it has made its full growth.

**Killing Lice on Hogs.**—M. E. C. asks what will kill lice on hogs.

**REPLY BY JOSEPH:**—Many things can be recommended as perfectly reliable. Make a strong suds of tobacco soap, or of whale-oil soap, or of carbolic soap, and give the animal a good washing. Thymo-cresol solution (sheep dip), or the kerosene emulsion, or strong tobacco tea, or buhach (Persian insect powder) put in water, when applied in the same way, will also put an end to the lice. The free use of insect powder in powder form is no less effective.

**Instructions on Celery Culture.**—Mrs. A. E. F., Ruchville, Pa., asks for information on celery growing, or for the name and publisher of a book giving such instructions.

**REPLY BY JOSEPH:**—Very full information on the subject is given in my new work, "How to Make the Garden Pay" (published by Wm. Henry Maule, Philadelphia); also in a little treatise by W. W. Rawson, Boston, Mass. The latter is a good little pamphlet that may be had for 20 or 25 cents a copy, while the first-named, more elaborate work on general gardening topics costs \$2 a copy.

**Underground Ice-House.**—P. W., McDonaldsville, Ohio. Formerly, many ice-houses were constructed underground, but the plan has been almost entirely abandoned. You can keep ice in the cellar of your summer house, if it is well drained. Run a tile drain from the cellar bottom, so that the water from the ice will run away quickly. Arrange it so that air cannot get to the bottom of the ice. After providing for thorough drainage, put in about two feet of sawdust on the bottom. Put about eighteen inches of sawdust on all sides of the ice, and two feet or more on top. Ice will not keep in the cellar unless it is well drained.

**Raising Cauliflower Seeds.**—M. E. G., of Buckley, Washington, writes: "I had some of my plants go to seed the first year, but was afraid to risk planting such seed. How is it usually grown?"

**REPLY BY JOSEPH:**—Where the season is long enough, seed may often be obtained by setting the plants very early in spring, but usually, this method is not reliable, as the yield is not large enough. This may be different in your locality. At any rate, you may use seed thus grown with perfect confidence. The usual way of producing cauliflower seed, however, is by starting plants in July and wintering them over in cellar or pit, to be planted out again in spring.

**Fertilizer for Wheat.**—J. M. G., Meadow View, Va., seeds a number of circulars advertising various brands of the Furman fertilizers, and asks which to select. The ground has good clay subsoil, and a heavy growth of weeds and clover on it.

**REPLY BY JOSEPH:**—The land cannot be in very bad condition when there is a heavy growth of weeds and clover on it. This top growth seems to indicate the presence of the needed nitrogen; at any rate, will probably furnish, with its roots, all the nitrogen that a crop of wheat may require. I mistrust that the element of plant food more than any other needed in the case is phosphoric acid. Of course, the addition of a little potash would do no harm. If the official analyses of the Farish-Furman formula (by Georgia and Mississippi state chemists) are correct, you have in it a fertilizer that I think will meet your case. It has about 12 per cent of available phosphoric acid, and over 3 per cent of potash; and at \$22 per ton is the cheapest fertilizer that has recently come under my notice. Its unmixed raw materials of plant food, without mixing, bagging, transportation and other incidental expenses, are worth the price asked for the manufactured article. It is almost suspiciously cheap.

**Canada Thistles.**—H. F., Pennington, N. J. From Beal's "Grasses of North America" we take the following: "Canada thistles have long roots, which store up nourishment during the latter part of summer and fall to feed the spring growth. To kill the thistles without the loss of a crop, have the land rich, if possible; at least, have it well seeded to clover, and by top dressing with plaster, ashes, or by some means, get as good growth to the clover as possible. As soon as the clover is in full bloom, and here and there a thistle shows a blossom, mow and make the crop, thistles and

all, into hay. After mowing, apply a little plaster to quickly start the growth of clover. You will find this to come much quicker than the thistles. As soon as the clover has a good start—from July 20th to August 5th—plow down, being careful to plow all the land and to fully cover all growth. Then roll and harrow at once, so as to cover every thistle. But few thistles will ever show themselves after this, and they will look pale and weak. When they do show, cultivate thoroughly with a cultivator having broad, sharp teeth, so as to cut every one off under the ground. In two days go over with a sharp hoe and cut off any that may have escaped the cultivator. Watch the thistles, and keep using the hoe and cultivator until freezing weather. You will see them getting scarcer each time and looking as though they had the consumption. By plowing the field just before freezing up you will have the land in the finest condition for a spring crop. This plan not only kills thistles but ox-eye daisies and other weeds. It is much better than a summer fallow, and without the loss of a crop."

## VETERINARY.

\*\*Conducted by Dr. H. J. Detmers.\*\*  
Veterinarian of the Ohio Agricultural Experiment Station, and Professor of Veterinary Surgery in Ohio State University.

To regular subscribers of FARM AND FIRESIDE, answers will be given through these columns free of charge. Where an immediate reply by mail is desired, the applicant should enclose a fee of one dollar, otherwise no attention will be paid to such a request. Inquiries should always contain the writer's full address. Queries must be received at least two weeks before the date of the issue in which the answer is expected. Subscribers may send their veterinary queries directly to Dr. H. J. DETMERS, 35 King Avenue, Columbus, Ohio.

**Tender Feet.**—G. W. S., Sumterville, Fla. If the feet are tender, keep them, as much as possible, clean and dry, and then see to it that the animal is always well shod, and shod in strict accordance with the condition of its feet.

**Milking Tube Wanted.**—L. O. T., Scriba, N. Y. I have no use for milking tubes, but if you want one, you may address H. Braun, Sons & Co., 24 North High street, Columbus, Ohio, who are dealers in and importers of surgical instruments of all kinds.

**Worms.**—I. C. R., Elba, N. Y. Inject once a day, for a few successive days, a pint of raw linseed oil into the rectum of your mare; see to it that she receives clean and sound food and that she is watered with good well water, and does not drink any water from stagnant pools, ditches, etc.

**Umbilical Hernia.**—D. B. P., McPherson, Kan., writes: "I have a sucking mare colt that has umbilical hernia. The lump is about the size of a hulled walnut."

**ANSWER:**—Leave it alone until the animal is at least a year old. It may disappear after the colt has been weaned and become accustomed to larger quantities of solid food.

**Wire Fence Wound.**—A. S., Las Animas, Col. The treatment will depend upon the parts wounded, and upon the extent and character of the wound. I can only say that the treatment, in all cases, must be strictly antiseptic, and that the wounded parts must be protected, either by bandages or otherwise, against external injurious influences.

**Indigestion.**—W. S. W., Orange Park, Fla. Give food that is perfectly sound and at the same time is easy of digestion, and has no tendency to ferment. If, then, the bloating should still continue, it will be admissible to give some condiments in small doses with each meal; for instance, a pinch of salt, small doses of ginger, or of mustard, or of powdered gentiana root, etc., until the digestive powers have sufficiently recuperated.

**A Big Ankle.**—W. B. M., Gibtown, Texas, writes: "My three-year-old horse has a big ankle. It seems hard, like gristle. He does not limp in walking, but when trotting he limps."

**ANSWER:**—Rest and judicious bandaging may possibly effect some improvement. The bandaging must be commenced with at the hoof, and the bandage itself must be put on nice and smooth, so as to cause uniform pressure, and must be renewed twice a day.

**Probably an Unsuitable Harness.**—D. W. S., Vincennes, Ind., writes: "My mare stops when in the plow, dodges, and hats her eyes as if something was about to hit her in them. She seems hearty and well every other way. She has been this way for two seasons."

**ANSWER:**—It may be the harness (collar) don't fit, and presses upon the jugular veins. Investigate it, and if you find this to be the case, change the collar. The same collar may fit very well in the spring, but may not fit at all in the summer or in the fall, especially if the animal has lost or gained flesh.

**Probably a Case of Pyaemia.**—A. J. L., Clinton, Neb., writes: "My yearling colt has knots or lumps on one of his legs, which break in a week or two after first seen. I thought they were caused by bruises or something of that nature, but not so. His ankle was bruised by another colt striking it with his foot, early this spring, but these knots began on the inside of the thigh about six or eight weeks ago."

**ANSWER:**—Your colt, it seems, is either suffering from pyaemia, or, possibly, affected with farcy. In the latter case, you will have to inform your state veterinarian. For further information see last issue of this paper.

**Lame Pigs.**—C. F. E., Gilman, Ill., writes: "Some of our largest spring pigs began to get lame in their hind legs, about a month ago, and got so bad that they cannot now use their hind legs at all. We are feeding corn and milk."

**ANSWER:**—The lameness may be paralysis, due to an affection of the spinal chord, or it may be produced by an inability of the muscles to perform their functions, caused by degeneration (granularization) of the muscular fibres, or, may be, by trichinosis. Without an examination it is impossible to decide what may be the cause of it. Time, possibly, may effect an improvement, but treatment, besides voluntary exercise and a light diet, is of very little, if any, use.

**Skin Disease.**—H. M. writes: "I have a mare seven years old, and used only for driving and riding. Last spring she was taken with a breaking out under her belly, extending back from girth almost to udder. This breaking out was somewhat swollen, and generally in the form of scabs, which would come off and leave, for a short time, a raw place that gave out a watery matter. I then washed it daily with a weak solution of carbolic acid, varied, sometimes, by salt water, and then rubbed in vaseline. This treatment had a good effect, but as it healed up, she began to have dry, scabby places on her face and neck, which, when the scab came off, took the hair with

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## it. I left off treating her belly, fearing that I was driving it somewhere else, and changed her feed from bay and corn to pasture and small feeds of oats occasionally. Now her belly is worse off than ever, and head and neck not so bad."

**ANSWER:**—In the first place, keep the animal in clean, dry premises. See to it that she is well groomed and cleaned, not only on the back, but also in places where sun and moon don't shine. Apply to the scabs, twice a day, a liniment composed of liquid subacetate of lead, one part; and olive oil, three parts. If the above is complied with, a healing will be effected in a few days, unless it be that the disease is already too inveterated and the skin too degenerated. Food easy of digestion, supplied in moderate quantities, will essentially aid in effecting a cure. Internal remedies are unnecessary and useless.

**A Stunted Calf.**—B. S. F., Worth, Mich., writes: "I have a bull calf that has not shed his old hair yet, and his head is all covered with warts; they are large ones, and have no necks. He has not done well."

**ANSWER:**—If what you call warts are real warts (papillomata), and if the same are very large, and at the same time flat, without a neck, the best you can do, probably, is to wash or to wet them with acetic acid. You must see to it, though, that you don't get the acid into the animal's eyes. If, however, what you call warts is an herpetic eruption (ringworm) you may paint them with tincture of iodine. If the calf is very much stunted, it will hardly be worth raising; at any rate, it should not be kept for breeding.

**Epizootic Ophthalmia.**—J. M. B., Marshall, Pa. The disease you complain of is epizootic ophthalmia. Cattle powders and horning horns, and all that kind of nonsense, can do no good; the disease will run its course, and it is even doubtful whether much can be accomplished by the use of eye-waters. A weak solution of nitrate of silver, two grains of the latter to an ounce of distilled water, may be used as an eye-water after the worst irritation has disappeared; and before that time, acetate of morphine dissolved in distilled water, in the same proportion as the nitrate of silver, may be used. In a former issue of this paper I recommended a calomel emulsion, which, if correctly prepared, will also be of some benefit.

**Swelled Knee.**—J. A. S., Jordan, Ind., writes: "I have a five-year-old mare that about one month ago got one of her hind knees cut on a harrow tooth. I worked her about the third day afterward, and then her knee got quite sore and her leg became almost useless for a time. The wound is now healed, but there is quite an enlargement left, and the limb seems to be somewhat strained."

**ANSWER:**—The knee cannot be restored to a normal condition; the morbid changes might have been prevented, but it is too late, now, to remove them. All that possibly can be done is to effect some improvement by giving rest and time. Iodine preparations, for instance, an ointment of iodide of potassium (one part of the latter to six parts of lard), rubbed in once a day, will somewhat promote the absorption.

**Contracted Tendon.**—J. J., Lompoc, Cal., writes: "I have a spring colt affected in the forefoot. The heels of the foot grow down, and his weight is thrown on his toe. I have cut out the extra heel growth, but still he is thrown on his toes, and the hoof does not seem to spread enough."

**ANSWER:**—It seems the trouble is less in the hoofs than in the flexor tendons, which probably are contracted (too short). If such is the case, an operation, consisting in a subcutaneous cutting of the contracted tendon or tendons, will be necessary. If there is no qualified veterinarian available, ask your physician and surgeon to perform the operation, first on one leg, and after that has healed, on the other. After the operation has been performed, the leg operated on must be supported and kept in a normal position by bandages, until the severed tendon or tendons have healed. It is, however, a question whether it will pay to raise such a colt.

## Our Miscellany.

She fell, and he ran to assist her, And picked up her muff and her "wrister." "Did you fall, miss?" he cried. "Did you think," she replied, "I sat down for the fun of it, mister?"

"JOHNNY, how many seasons are there?" "Three; pepper, salt and de base-ball season."

The devil can stand anything but good music, and that makes him roar.—*Martin Luther.*

SCISSORS-GRINDERS are exceptions to the general rule; they are most prosperous when things are dull.—*Boston Herald.*

Mrs. M. E. BEASLEY has an income of \$20,000 from a barrel-hooping machine, by means of which 1,000 barrels can be hooped in a day.

"A DEMAGOGUE," said a small boy who builded better than he knew, "is a vessel that holds wine, gin, whiskey, or any other liquor."

It has been discovered that a strong, flexible fibre can be secured from hop vines, and that it can be manufactured into a most excellent paper.

TEXAS promises to take high rank as a pork producing state, now that large refrigerators are being built in the prominent Texas business centers.

"THERE is very little difference between you and the old hen, Scribbler. You both scratch for a living." "Yes, but the old hen scratches for one and gets it."

A LITTLE girl who had been told that she might take her choice between being spanked and going to bed in the daytime, replied, "Bedness is awful, but spanking is worse."

NEIGHBOR JONES is growing poor because the street-car fare upon his daily route has been reduced. Formerly he saved six cents by walking to his work; now he saves only five.

WHAT was once a hen party is now dignified by the title of "dove dinner." The name is sweet enough, but the work of letting daylight into the skeleton closets and ripping reputations up the back is as effectually done as ever.

A BARREL of whiskey contains headaches, curses, tears, sorrows, regrets, debts, pains, blasted hopes, falsehoods, agony, poison, poverty, ruin, terrors, hunger, grous, orphans, mous and serpents. So an old song says, and there is a barrel of truth in the song.—*Pioneer*

MUCH is said about "Hibernicism," but it was not in Ireland that a story was published in which the hero thus describes the dreadful result of an accident which occurred to him: "Upon getting to my feet, and taking a good look all around me, I discovered that I was stone blind."

MERCHANT'S wife (suddenly appearing in her husband's office)—"Hah! I thought you said your typewriter girl was an old maid." Merchant (much confused)—"Um—er, yes, m'dear, of course, of course; but she is sick to-day, and she sent her little grand daughter as a substitute."—*Philadelphia Record.*

A RELIEF TO HIMSELF.—Gentleman (to Uncle Rastus, who is troubled with a balky mule)—"Uncle Rastus, do you think kicking that mule in the stomach will make him go?" Uncle Rastus—"Da hain't nuffin wot'l make dat mule go when he 'cludes not to, sah. I'm only kickin' him fo' my own satisfaction."—*Accident News.*

WORRIED Wife—"Oh, doctor, what has detained you? I sent for you at twelve o'clock; my husband is very low, indeed." Doctor (complacently)—"Yes, I received your call then, but as I had an engagement with another patient in this neighborhood at six o'clock I thought I'd make one job of it and kill two birds with one stone."

EASTERN lady (in Colorado)—"It makes me sick to hear some of your western names. The idea of calling a pretty town like this Wagonwheel." Resident—"It isn't a nice name, and if we ever change it I promise to let you know at once." "I wish you would." "Where shall I address you?" "Horseheads, New York."—*Philadelphia Record.*

THE HUMAN BODY DESCRIBED.—The following was recently turned in as a bona fide composition by an Indiana school-boy: "The human body is made up of the head, the thorax, and the abdomen. The head contains the brains when there is any. The thorax contains the heart, lungs and diafragma. The abdomen contains the bowels, of which there are five, A, E, I, O, U, and sometimes W and Y."

A MINISTER, with a rather florid complexion, had gone into the shop of a barber, one of his parishioners, to be shaved. The barber was addicted to heavy bouts of drinking, after which his hand was consequently unsteady at his work. In shaving the minister on the occasion referred to, he inflicted a cut sufficiently deep to cover the lower part of the face with blood. The minister turned to the barber and said, in a tone of solemn severity: "You see, Thomas, what comes of taking too much drink." "Ay," replied Thomas, "it makes the skin verruca tenner."—*Sheffield Telegraph.*

## SPEED OF FLIES.

The rapidity with which flies pass through the air is not likely to be appreciated by those who see only with what apparent ease they do it. Flies will keep up with a fast horse, and that, too, without lighting on him. In an open express car, through which the wind blows, they hold their places, flying this way or that without hitting against the sides. They must, therefore, go faster than horse or car. Give man speed like this, proportioned to his size, and going around the world would be a matter of only a few hours.

## WRINKLE IN RECKONING DATES.

A gentleman was showing a curious thing in the state house this noon—showing how to tell the day of the week of any date. He gave the following formula, which can be tried by any one: Take the last two figures of the year, add a quarter of this, disregarding the fraction; add the date of the month, and to this add the figure in the following list, one figure standing for each month, 3—6—6—2—4—0—2—5—1—3—6—1. Divide the sum by 7, and the remainder will give the number of the day in the week, and when there is no remainder, the day will be Saturday.

As an example, take March 19, 1890. Take 90, add 22, add 19, add 6. This gives 137, which divided by 7, leaves a remainder of 4, which is the number of the day, or Wednesday.—*Providence Telegram.*

## SENDING PARCELS BY MAIL.

Parcels sent by post are subject to hard usage before they reach their destination, and if carelessly tied up, the contents are apt to be lost or destroyed. Whatever the contents, they must be as snugly packed as possible and tied with a strong cord. The narrow pieces of ribbon that often come around handkerchiefs, and the bits of nice twine if saved, will come handy here. If photographs, cards, pressed flowers, etc., are laid between two pieces of pasteboard a little larger than the thing sent, and notches made in the center of all four sides in which to tightly tie the strings, they will, as a general thing, come out in good condition. Stout, white paper is the best for the outside wrapper, and the address written clearly in some conspicuous place will help insure for it a safe delivery.

## CHOCOLATE.

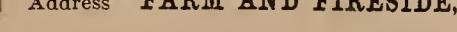
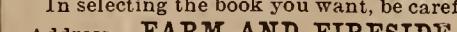
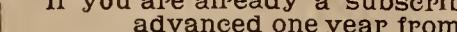
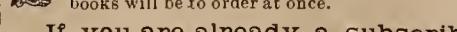
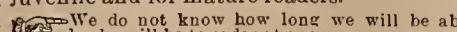
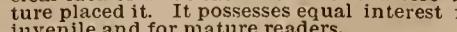
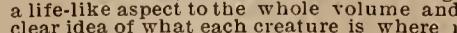
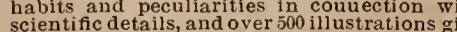
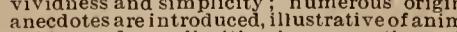
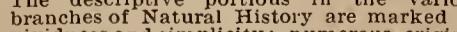
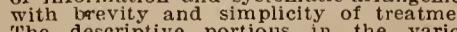
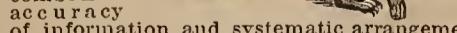
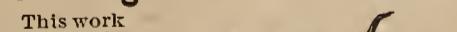
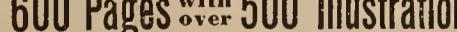
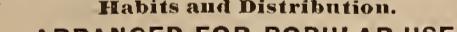
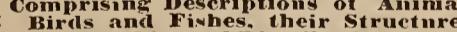
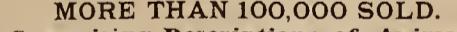
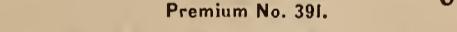
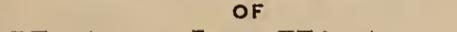
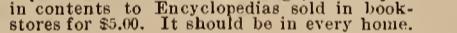
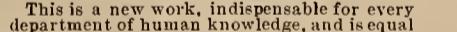
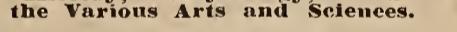
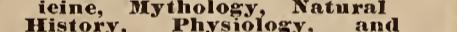
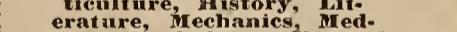
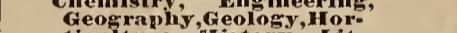
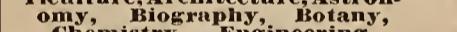
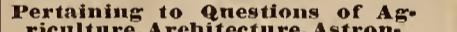
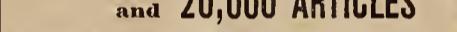
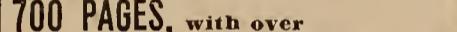
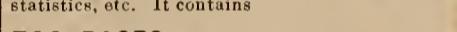
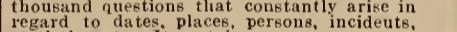
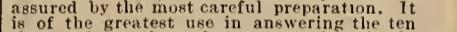
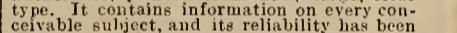
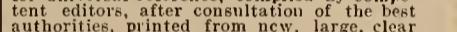
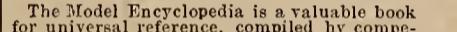
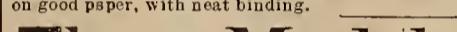
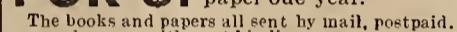
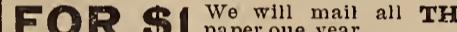
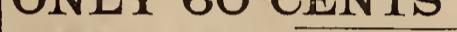
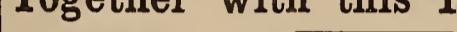
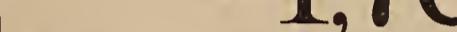
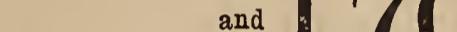
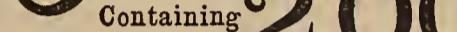
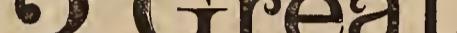
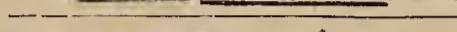
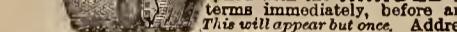
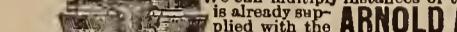
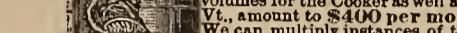
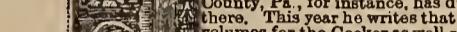
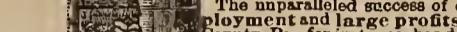
Chocolate is made from the seeds of the theobroma cocoa tree, which is found only in tropical climates, and bears a fruit somewhat like a cucumber in shape, inside which are the brownish seeds, or beans, which form the cocoa beans of commerce. The principal constituent of these beans is a soft, solid oil called cocoa butter, and their attractive principle is the theobromine, analogous to the caffeine in coffee. There is very little pure chocolate in the market, owing to the great medicinal value of the cocoa butter or oil, which is expressed in the grinding, and cheaper, less nutritious oil supplied. One of the best ways to buy cocoa or chocolate, it is said, is to purchase what are called "cocoa nibs," which are the beans crushed into fragments, but not ground, for the chocolate is frequently adulterated with roasted hazelnuts or almonds, rice meal and other ingredients.

The best chocolate is obtained by first burying the fruit until the pulp is decayed and only the beans are left. The beans are roasted and the shells removed. The chocolate is then ground between stones, the friction heat of the grinding melting it so that it is a soft, molten mass as it drips from the stones and is poured into molds. The melted chocolate is pressed in a cloth until all the oil is expelled; the sediment is ground very slowly to prevent remelting it, and the powder bolted into flour through silken sieves, and then it is called cocoa, which makes a lighter, less nourishing, but more easily-digested beverage than chocolate.

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# INDEX TO FARM AND FIRESIDE.

VOLUME XIII.—October 1, 1889, to September 15, 1890.

Articles are indexed under departments and by the number of the issue in which they appear. The volume begins with the first of October, and the semi-monthly issues are numbered regularly from 1 to 24. The articles marked thus \* are illustrated.

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Fence machine.....	18	pruning.....	15	Continuous apartment.....	2	Distortion of the pastern joint.....	12, 14					
Fertility of soil, mixed.....	7	Budding in the spring.....	10	Diphtheric roup.....	15	Diverticile in the throat.....	20					
for beans.....	9	Buffalo berry.....	20, 24	Dividing the flock.....	14	Don't shed its coat of hair.....	20					
" cabbage.....	20	Currants, black or red.....	15	Droopy fowls.....	10	Dislocation of the patella.....	11, 21					
" clay loam.....	12	Cutting tip downward.....	15	Ducks, Pekin.....	19	Disordered digestion.....	11					
" low lands.....	17	Diseased apple branches.....	20	weights of.....	14	Tetanus.....	8					
" melous.....	16	Rock breakers.....	2, 9	Eggs not hatching.....	7	Thorongpin.....	5, 8, 17, 23					
" potatoes.....	5, 6	Root house.....	18	Fattening old fowls.....	7	Thumps.....	13					
" tobacco.....	11, 14	Rye for green manure.....	12	Feather eating.....	21	Thrush.....	9, 19					
" wheat, etc.....	1, 24	Salt as a fertilizer on wheat.....	4	Feeding chicks and ducklings.....	18	Ticks.....	5					
Filter.....	22	for currant worms.....	6	Fertilizers for fruit trees and vines.....	1, 15	Tuberculosis.....	19					
Flax culture.....	9	Sawdust as an absorbent on asparagus bed.....	5	for grapes.....	8	Unsuitable harness.....	24					
straw for feed.....	10	Sawing made easy.....	9	" strawberries.....	21	Uterine trouble.....	8					
Fodder corn.....	14	Scallion onions.....	4	" the orchard.....	7	Vertigo.....	8, 12					
Fruit trees wanted.....	13	Seedling.....	11	Fig culture.....	2	Veterinary schools.....	22					
Garden seeds.....	5	Seedling.....	11	Flemish Beauty.....	6	Visited appetite.....	14					
German agricultural paper.....	15	Self-threading needles.....	7	Forced fruit.....	24	Warts.....	8, 9, 14, 15, 17, 20, 21, 22					
millet.....	17	Silf culture.....	3, 13	Frosted strawberry bloom.....	20	Weak digestion.....	9					
Giant Rocca onion.....	12	Silos.....	10, 17	Fruits for northern New York.....	12	Weakness.....	8, 11					
Ginseng.....	22, 24	in southern California.....	3	Fungus on apples.....	11	Help with the lessons.....	23					
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Harrow for coru.....	10	Solubility of phosphatic rocks.....	14	Hardy fruits.....	11	In one bushel of corn.....	21					
Hay cutter.....	4	Sorghum caue.....	11	Imperfect for cutting dead wax.....	11, 17	Ingersoll's explanation.....	6					
Hemp culture.....	16	mills.....	2	Implement for cutting dead raspberry canes.....	14	Intolerance.....	8					
Hen manure and burried bones.....	13	sugar.....	9, 13	Indigestion.....	8, 12, 24	Irregular.....	8					
Hog rings.....	13	Sowing fertilizer by band.....	1	Injury by male.....	14	Irregular.....	8					
Honey producing trees and plants.....	13	Spanish onion.....	21	Is there any money in it.....	10	Irregular.....	8					
Hop culture.....	12	Squash vino borer and melon caterpillar.....	3	Lice.....	3, 7, 12, 17	Irregular.....	8					
Horseradish.....	1, 14	Stable manure and muck.....	1	Locusts.....	23	Irregular.....	8					
Hot-bed.....	10	Hardy fruits.....	11	Making hens lay.....	23	Irregular.....	8					
heater for.....	12	Implement for cutting dead raspberry canes.....	14	Millets.....	9	Irregular.....	8					
House plans.....	24	Imperfect for cutting dead raspberry canes.....	14	Moistening eggs during incubation.....	18	Irregular.....	8					
Hyacinths in pots*.....	6	Straw for horses.....	11	Moulting hens.....	24	Irregular.....	8					
Ice machine.....	13	Stump puller.....	5	Hydruria.....	22	Irregular.....	8					
Improving clay soil, the farm.....	3	Stamps, to get rid of.....	5	Indigestion.....	8, 12, 24	Irregular.....	8					
Insects on roses*.....	12	Sulphate and muriate of ammonia.....	7, 10	Injury by male.....	14	Irregular.....	8					
in cellar.....	23	Sweet potatoes.....	7, 23	Is there any money in it.....	10	Irregular.....	8					
" melous to melons.....	20	Timothy grass.....	12	Lice.....	3, 7, 12, 17	Irregular.....	8					
Johnson grass.....	5, 9, 21, 23	wintering for seed.....	12	Locusts.....	23	Irregular.....	8					
Kainit and wood ashes for oats.....	11	Tankage.....	24	Mulch for berry patches.....	4	Irregular.....	8					
" oranges.....	7	Tanning hide.....	12	Mulching fruit.....	7	Irregular.....	8					
Kerosene emulsion.....	12	Telegraphy, schools of.....	21	Orchard filled with sediment.....	15	Irregular.....	8					
Killing lice on hogs.....	24	Toes.....	11	overmanuring.....	18	Irregular.....	8					
King of the Earliest tomato	13	Timothy and alsike clover.....	24	overmanuring.....	18	Irregular.....	8					
Land plaster as an absorbent.....	10	Tomato rot.....	2	overmanuring.....	18	Irregular.....	8					
rollers.....	9	Tomatoe.....	2	overmanuring.....	18	Irregular.....	8					
Lard oil.....	14	Ornamental bedges.....	13	overmanuring.....	18	Irregular.....	8					
Leather ashes.....	17	Top dressing meadowe.....	22	overmanuring.....	18	Irregular.....	8					
Lice on cabbages.....	20	Tools for mechanics.....	1, 21	overmanuring.....	18	Irregular.....	8		</td			

## The Markets.

BUTTER.—	CHICAGO.	NEW YORK	N. O. E. L. N.
Fancy Cream'y...	22 1/2@ 23 1/2	23 @ 25	22 @ 25
" Dairy.....	10 @ 18	14 @ 16	13 @ 16
Common.....	5 @ 8	9 @ 12	.....
GRAIN.—			
Wheat No. 2 w't'r	1 02@ 1 03	1 08@ 1 09	.....
Corn, ".....	45 @ 47%	56 1/2@ 57 1/2	61 @ 67%
Oats, ".....	35 @ 37	.....	50
LIVE STOCK.—			
Cattle, Extra.....	5 05@ 5 20	.....	.....
" Shippers...	3 25@ 3 50	4 00@ 4 95	2 25@ 2 75
" Stockers...	2 70@ 3 15	.....	.....
Hogs.....	3 65@ 4 40	3 50@ 4 75	3 25@ 4 00
Sheep, com. to good	4 60@ 5 00	4 00@ 5 30	2 25@ 3 25
" Lambs.....	4 60@ 6 25	5 50@ 7 50	.....
PROVISIONS.—			
Lard.....	6 15	6 50	5 50
Meat Pork.....	10 15	10 00@ 10 50	12 75@ 13 00
SEEDS.—			
Flax, No. 1.....	1 41	.....	.....
Timothy.....	1 40	.....	.....
Clover.....	4 00@ 4 20	.....	.....
WOOL.—			
Fine, Ohio & Pa.....	.....		
" Western.....	24 @ 36	.....	.....
" Unwashed.....	14 @ 18	.....	.....
Medium, Ohio & Pa.....	.....		
" Western.....	28 @ 30	.....	.....
" Unwashed.....	20 @ 23	.....	.....
Combing & Delaine	.....		
Coarse & Black.....	.....		.....

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